

HEALTH, OPPORTUNITY, PROSPERITY PROJECT (HOPP):
AN ACCOUNTABLE CARE COMMUNITY ADDRESSING ECONOMIC STABILITY IN
CUMBERLAND COUNTY, NC

By

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Date

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ABSTRACT

Veronica Eisenmann, Grace Lee, Laura Reardon and Tierra Thompson:
Health, Opportunity, Prosperity Project (HOPP): An Accountable Care Community Addressing
Economic Stability in Cumberland County, NC
(Under the direction of Seema Agrawal and Celeste Davis)

The poverty rate in Cumberland County, NC is higher than the state average. Promotion of economic stability among the low-income population in Cumberland County is of utmost importance in promoting health. The Health, Opportunity, Prosperity, Project (HOPP), Accountable Care Community (ACC) aims to address economic stability with focus on employment and direct health education. The three components of HOPP include strengthening unemployment insurance, business engagement and employment training and the Expanded Food and Nutrition Education Program (EFNEP). Key partners involved in this ACC include the Cumberland County Department of Public Health, local businesses and community organizations, community members, policy makers, the NC Office of State Human Resources, NC Works Career Center, NC State University, the US Department of Labor and the NC Division of Employment Security.

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LIST OF ABBREVIATIONS

ACC	Accountable Care Community
CATWOE	Customer, Actor, Transformation, Worldview, Owner, Environment
CDC	Centers for Disease Control and Prevention
CCDPH	Cumberland County Department of Public Health
EFNEP	Expanded Food Nutrition Education Program
FPL	Federal Poverty Level
HOPP	Health, Opportunity, Prosperity Project
RASCI	Responsible, Accountable, Supportive, Consulted, Informed
SDOH	Social Determinants of Health
SNAP	Supplemental Nutrition Assistance Program
UI	Unemployment Insurance
USDA	United States Department of Agriculture

COMMON PROPOSAL

Accountable Care Community Project Aims and Goals

A key objective of the Social Determinant of Health (SDOH), economic stability, is to "reduce the proportion of persons living in poverty" (ODPHP, 2020). The North Carolina Healthy People 2030 Objectives include a Cumberland County-specific objective to reduce the poverty level from 17% to 10% (Cumberland County Dept of Public Health, 2019). The Health, Opportunity, Prosperity Project (HOPP) Accountable Care Community (ACC) addresses employment, financial stability, and nutrition education and aims to improve health behaviors and economic stability for the low-income population of Cumberland County (those at or below 200% of the Federal Poverty Level). HOPP contains three components; Strengthened Unemployment Insurance (UI), Business Engagement and Employment Training and the Expanded Food and Nutrition Education Program (EFNEP).

Proposed Innovation

HOPP targets each level of the socio-ecological framework (SEF) providing a holistic approach to economic stability (see Appendix A.1, Figure A.1 for a visual of the SEF).

Strengthened Unemployment Insurance

Strengthened unemployment insurance (UI) is a joint federal-state social insurance program (North Carolina Budget and Tax Center, 2021). This program provides temporary cash payments to alleviate economic hardships for people who experience job loss. Studies show that strengthening UI is associated with an increased likelihood of having or maintaining health

insurance, tied to increases in Medicaid enrollment, and increases the likelihood that unemployed workers take advantage of preventive health services, routine checkups, and exams (North Carolina Budget and Tax Center, 2021). Strengthened UI also substantially decreases poverty rates amongst the unemployed (North Carolina Budget and Tax Center, 2021). Specific parameters of strengthened UI are as follows: Eliminate multiple waiting weeks for unemployment benefits, change the duration of benefits from a sliding scale to a fixed 26 weeks, and allow people who leave employment for spousal relocation, health reasons, domestic violence, or family hardship, to claim UI (North Carolina Budget and Tax Center, 2021).

Business Engagement and Employment Training

Research suggests that programs that provide education, training, and support services help create sustained employability (Mitchell, 2018). Our recommendation is to expand the Workforce Planning Policy, already implemented by the NC State Office of Human Resources, to create a program partnering with local businesses in the county (i.e., Cape Fear Valley Health System, Goodyear Tire, Walmart, Fayetteville Technical Community College). The partnership would include completing needs assessments at these organizations and developing comprehensive education, training, and support programs that would sustainably fill employment gaps in the county. Programs focus on unemployed and underemployed Cumberland County residents living in poverty to create sustainable jobs emerging from the program. This program would strengthen the workforce by improving employees' skill set and education, thus creating greater opportunities for advancement and promotion and building up the county's economy (International Labour Office, 2010).

Expanded Food and Nutrition Education Program (EFNEP)

To help improve health-related behaviors among low-income residents, HOPP also includes implementing the USDA's Expanded Food Nutrition Education Program (EFNEP). Poverty is associated with poor health outcomes, including chronic disease risk and food insecurity for adults and children (FRAC 2017). EFNEP operates through land grant universities and community partners to create an opportunity for health and nutrition education for low-income families (USDA, 2020). EFNEP uses an evidence-based curriculum to target behaviors in four core areas: diet quality and physical activity, food resource management, food safety, and food security (USDA, 2013). EFNEP has a history of success among program recipients and focuses on providing low-income families with the tools needed for food budgeting and nutritional well-being (USDA, 2013). EFNEP targets multiple levels of the SEF, including individual behavior change, interpersonal shared resources in families, and the collaboration of community partners (USDA, 2013).

Potential Public Health Impact

A high poverty rate is both a cause and consequence of poor economic conditions, leading to adverse health outcomes for all populations (Cumberland County, 2019). Physical health problems such as obesity, behavioral problems, emotional problems, social isolation, and inability to afford necessary expenses are both outcomes and factors that exacerbate health disparities (Cumberland County, 2019). Initiatives to address unemployment and poverty in the county can lift vulnerable populations out of poverty and provide means, such as a livable income and unemployment benefits, to improve associated health outcomes for those below the Federal Poverty Level (Cumberland County, 2019). Higher wages and better-quality sustainable employment could increase the likelihood of obtaining better quality nutritious food,

transportation, housing, greater ability to adhere to medical advice, and change health habits, decreasing obesity and chronic disease as a byproduct (State of the County Health Report, 2019).

This initiative will lead to broader impacts through sustainability and scalability measures. HOPP will implement a comprehensive evaluation plan to ensure data collection throughout programming, mitigate challenges, change necessary components, and adapt the program to fit the community. Additionally, HOPP will foster and maintain relationships with all stakeholders involved, particularly for future funding and grant actions necessary to ensure sustainability. Challenges that accompany HOPP include political climate, finances, ensuring continued stakeholder engagement, limited evidence-based literature regarding previous implementation projects that address economic instability in Cumberland County, and staff scalability. Addressing challenges requires a clear and concise communication plan to ensure effective conflict management. Grant applications, continued stakeholder engagement, and necessary budget restructuring provides adequate funding.

Outcomes, Milestones, and Deliverables

Strengthened Unemployment Insurance

The strengthened UI program evaluation is through an existing system by the United States Department of Labor. The evaluation plan's core measures are benefits measures, program integrity measures, appeals measures, and tax measures (United States Department of Labor, n.d.). A level of performance is assessed for each component of each core measure (United States Department of Labor, n.d.).

A three-tiered evaluation assesses progress for the Cumberland County community. The first tier is an analysis of the entire insurance program in delivering unemployment benefits to

the Cumberland County community. In partnership with the North Carolina Division of Employment Security and the North Carolina Board of Review, data collected from both agencies will be analyzed to ensure the requested changes were made to strengthen UI. In addition, a continuous analysis will be conducted by the county on the quality of benefits, barriers to access, and utilization of program benefits. Monthly interviews, site visits, and surveys will be conducted with the community to assess program progress. The second tier is a gross impact analysis, which provides information on the number of participants enrolled, demographic information, and program inputs and outputs. Finally, the third tier consists of a net impact evaluation with a cost-benefit analysis. The net impact evaluation is used to determine the program's positive and negative outcomes to understand the participants' outcomes, while the cost-benefit analysis will determine the cost-effectiveness. This evaluation will require at least three years to allow for enough time for a follow-up on employment and wage outcomes. A three-year outcome report will be made available after the first three years of program implementation.

Business Engagement and Employment Training

This initiative is considered successful if 1) more Cumberland County residents are gainfully employed in sustainable positions, and 2) local businesses report a more consistent and productive workforce. Through focus groups and outreach, the team will identify an initial cohort of agencies and businesses to engage in Workforce Planning Program training. Periodic evaluations will assess agency/business employment changes, increased job opportunities, challenges, and successes. Quarterly to 6-month meetings with stakeholders to process evaluations will help inform future iterations of the initiative. Additionally, the evaluation of this specific intervention will be continuous and will occur before, during, and annually post-program

implementation. Engagement of multiple stakeholders with focus groups, town hall meetings, and one-on-one interviews will provide qualitative data regarding the effectiveness and any program barriers.

EFNEP

EFNEP has shown to be a cost-effective nutrition education program which promotes sustainability in funding (Baral et al., 2013). Program timeline includes first developing the partnership with the Cumberland County Department of Health, Action Pathways (operates the Second Harvest Food Bank of Southeast NC), and the land grant recipient, NC State University. The program curriculum follows USDA guidance, and participants must complete at least six lessons to see an impact (USDA, 2020). EFNEP has an established evaluation plan to measure participant behaviors (USDA, 2020). The evaluation includes a pre and post-intervention questionnaire, a 24-hour dietary recall, a quality of life scale (CDC HRQOL-4), and post-intervention focus groups (USDA, 2020; CDC, 2018). Success is defined by improving measured health behaviors and quality of life from pre to post-intervention. Based on national and North Carolina impact data, the expectation is that 90% of adults will report improvement in one or more core areas of the program (USDA, 2020; NCEFNEP, 2020).

Team of Key Stakeholders

Implementing HOPP requires the participation of several stakeholders. While not all stakeholders will be actively engaged in every aspect of the initiative, they will all be considered partners in the project. They will be made aware of the progress of the initiative, as appropriate (see Appendix A.2, Table A.1 for a list of stakeholders and their areas of participation in HOPP).

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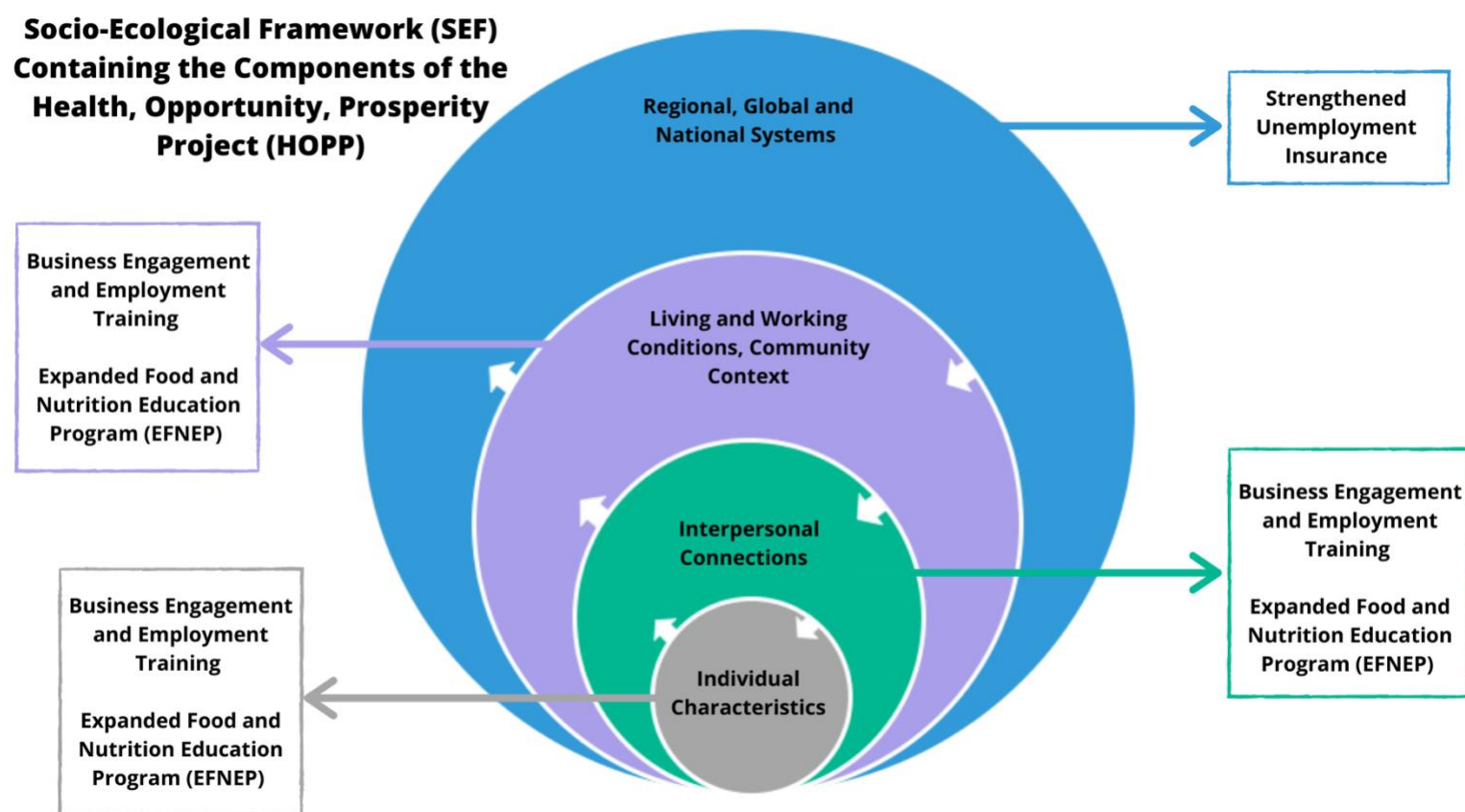
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APPENDIX A.1

Figure A.1. Visual Representation of Health, Opportunity, Prosperity Project (HOPP) Components on the Socio-Ecological Framework (SEF)



APPENDIX A.2

Table A.1. Stakeholders and Areas of Participation in the Health, Opportunity, Prosperity Project (HOPP)

Stakeholder	Area(s) of Participation
Cumberland County Department of Public Health (CCDPH)	Expanded Food and Nutrition Education Program (EFNEP) Business Engagement & Employment Training
Action Pathways - Second Harvest Food Bank of Southeast North Carolina	Expanded Food and Nutrition Education Program (EFNEP)
North Carolina State University	Expanded Food and Nutrition Education Program (EFNEP)
Residents of Cumberland County, specifically low-income residents	Expanded Food and Nutrition Education Program (EFNEP) Business Engagement & Employment Training
North Carolina State Office of Human Resources	Business Engagement & Employment Training
Local businesses that employ significant numbers of Cumberland County residents (Walmart, Goodyear Tire, Cape Fear Valley Health System) and other businesses interested in increasing and improving employment	Business Engagement & Employment Training
North Carolina Works Career Center of Cumberland County	Business Engagement & Employment Training
Cumberland County Department of Social Services	Business Engagement & Employment Training
US Department of Labor	Strengthened Unemployment Insurance
North Carolina Division of Employment Security	Strengthened Unemployment Insurance
Policy Makers	Strengthened Unemployment Insurance

APPENDIX B: GROUP DELIVERABLES

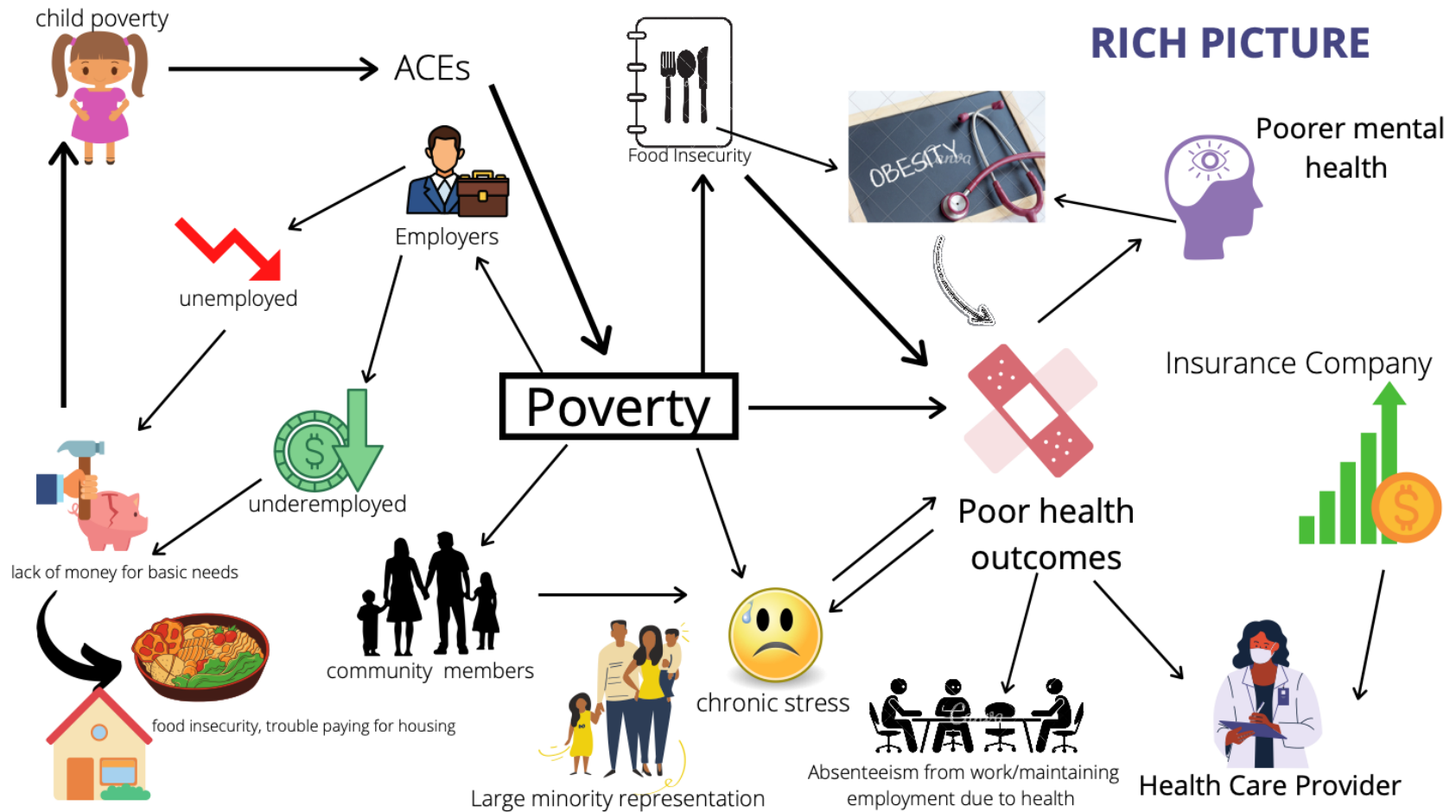
RASCI

Table B.1. RASCI Stakeholder Analysis

RASCI Levels		
Who is...	Policy Transformation	Rationale for Partner Participation
RESPONSIBLE	NC Office of State Human Resources	Signed an MOU with the Cumberland County Dept of Health to collaboratively spearhead this initiative, provide resources, and evaluate outcomes
	Cumberland County Dept of Health	Signed an MOU with the NC Office of State Human Resources to collaboratively spearhead this initiative, provide resources, and evaluate outcomes
ACCOUNTABLE	NC Office of State Human Resources	Signed an MOU with the Cumberland County Dept of Health to collaboratively spearhead this initiative, provide resources, and evaluate outcomes
	Cumberland County Dept of Health	Signed an MOU with the NC Office of State Human Resources to collaboratively spearhead this initiative, provide resources, and evaluate outcomes
SUPPORTIVE	Local businesses in the county (i.e., Cape Fear Valley Health System, Goodyear Tire, Walmart, Fayetteville Technical Community College)	Provide resources for the initiative (i.e., job opportunities, job training) May have input on how to improve or streamline analyses for their use
	NC Office of State Human Resources	Provide analytical tools, resources for the local businesses engaging in this initiative
CONSULTED	NC Office of State Human Resources	They have successfully used these analyses with agencies in the past
	Under- and unemployed residents	They are the driving force for the initiative, need to be kept involved and informed along the process
INFORMED	Agencies not directly engaging in the initiative	They may express interest at a later time if the initiative produces successful outcomes
	General county population	They deserve to know the initiatives in play to improve the well-being of their community

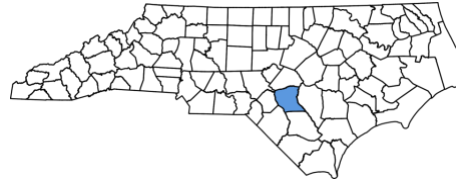
RICH PICTURE

Figure B.1. Soft System Analysis: Rich Picture of Poverty and Health Outcomes



PERSUASIVE PITCH PRESENTATION

Slide 1:



Health, Opportunity, Prosperity Project (HOPP) An Accountable Care Community Addressing Economic Stability in Cumberland County, NC

UNC CHAPEL HILL –GILLINGS SCHOOL OF GLOBAL PUBLIC HEALTH CAPSTONE PROJECT: SPHG 992 973B

VERONICA EISENMANN – NUTRITION

GRACE LEE –HEALTH POLICY

LAURA REARDON –LEADERSHIP IN PRACTICE

TIERRA THOMPSON –LEADERSHIP IN PRACTICE

Slide 1 Narrative:

Welcome stakeholders. Today we will be presenting you the Health, Opportunity, Prosperity Project (HOPP): An accountable care community addressing economic stability in Cumberland County, NC.

Slide 2:

Presentation Agenda

- ✓ Overview of the Social Determinant of Health (SDOH) and the Accountable Care Community (ACC)
- ✓ Policy Pitch for our Legislatures
- ✓ Leadership Pitches to NC Works Career Center and Walmart
- ✓ Nutrition Program Overview and Evaluation Plan for the Cumberland County Department of Health
- ✓ Concluding remarks



Slide 2 Narrative:

Thank you to all of our stakeholders for joining us this evening. During tonight's presentation we will provide you with an overview of the social determinant of health, economic stability and the components of our Accountable Care Community. We will then present our policy pitch to our legislatures, pitches to the Cumberland County NC Works Center and Walmart as well as an overview of our nutrition program and evaluation to the Cumberland County Department of Health.

Slide 3:

Social Determinant of Health (SDOH): Economic Stability

- Key Objective: Reduce the proportion of persons living in poverty
- Goal: *Help people earn steady incomes that allow them to meet their health needs* (Healthy People 2030)
 - Employment programs, career counseling, reliable childcare
 - Finding and keeping a job, earning a living wage
- Sustainable employment:
 - Better food
 - Transportation
 - Housing
 - Ability to adhere to medical advice, change health habits, reduce disease
 - Change health habits, decrease chronic disease



Image courtesy of Healthy People 2030

(Haskins, 2017; State of the County Health Report, 2019; Healthy People, 2030)

Slide 3 Narrative:

Economic stability remains a top Social Determinant of Health in the Healthy People 2030 goals. Specifically, the goal is to "help people earn steady incomes that allow them to meet their health needs." They identify that employment programs, career counseling, and good childcare options can help more people find and keep jobs. Alternatively, due to problems such as ongoing health conditions that affect employability, or simply not earning a living wage, many people remain in poverty or unable to meet their basic needs.

Steady employment has more than economic benefits. Employment can also create a needed family structure, enhance personal identity and purpose, and provide opportunity for socialization. Alternatively, previous research has identified associations between unemployment and family destabilization, suicide, substance misuse, shortened lifespan, and overall poor psychological well-being (Haskins, 2017).

Higher wages and better-quality sustainable employment could increase the likelihood of obtaining better quality nutritious food, transportation, housing, greater ability to adhere to medical advice, and change health habits, decreasing obesity and chronic disease as a byproduct (State of the County Health Report, 2019).

Slide 4:

Priority Population and Economic Profile

Priority Population: Low-Income families/individuals in Cumberland County (those at or below 200% of the Federal Poverty Level)



Economic Measure	Cumberland County	North Carolina
Poverty Rate	17.6%	16.8%
Median Income	\$45,716	\$52,413
Unemployment Rate	5.1%	3.9%

(Cumberland County Department of Health, 2019)

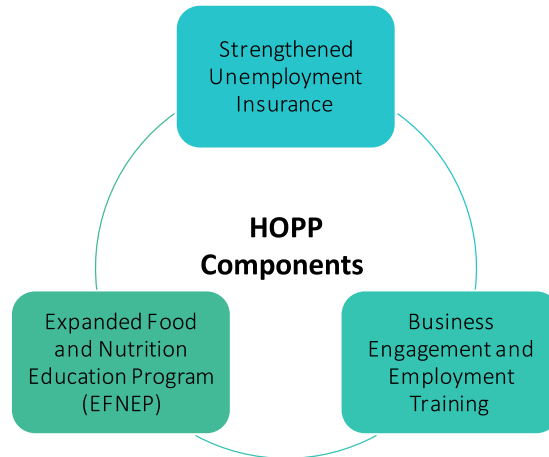
Slide 4 Narrative:

The priority population HOPP targets are low income individuals and families living at or below 200% of the federal poverty level. In Cumberland County the poverty rate, 17.6%, and unemployment rate, 5.1%, are higher than the state average and median income is lower than the state average (Cumberland County Department of Public Health, 2019).

Slide 5:

Goal and Components of HOPP

HOPP aims to improve health outcomes and economic stability for the low-income population of Cumberland County



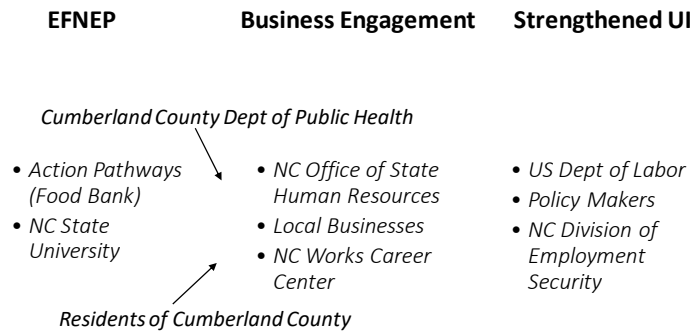
Slide 5 Narrative:

The goal of HOPP is to improve health outcomes and economic stability for the low-income population in Cumberland County by focusing on employment factors and direct health education. The three policy and program components in the ACC include strengthening unemployment insurance, business engagement and employment training and the Expanded Food and Nutrition Education Program.

Slide 6:

Key Partners of HOPP

❖ HOPP includes a coalition of cross-sector stakeholders that will collaborate in order to improve the health, wellbeing and prosperity of the population by reducing poverty



Slide 6 Narrative:

In addition to everyone joining us tonight, HOPP engages partnerships with local, state and federal level stakeholders from various sectors. Here we have some of the key partners involved in the three areas of the ACC.

Slide 7:

Policy Pitch: Strengthened Unemployment Insurance

North Carolina House Bill 101

**SAY YES TO STRENGTHENED
UNEMPLOYMENT INSURANCE**



Strengthened unemployment insurance improves health outcomes.

- Studies show an increased likelihood of having or maintaining health insurance and higher Medicaid enrollment.¹
- There is increased likelihood that unemployed workers take advantage of preventive health services, routine check-ups, and exams.¹

Insurance provides people with support and counteracts negative unemployment-related outcomes.

- The program provides people to stay connected to job searches, build useful work skills, and counteract negative feelings associated with job loss.¹

Unemployment insurance substantially decreases poverty rates amongst the unemployed.

- Studies indicate that more adequate wage replacement from unemployment insurance improves overall health and well-being.¹

North Carolina must support strengthening the unemployment insurance program by saying YES to House Bill 101.



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Slide 7 Narrative:

And now I will be turning to the legislators to present our policy pitch. Thank you to the representative members of the committee for allowing me to speak today. My name is Grace Lee and I am here representing the NC Center for Justice.

I am here to talk to you about saying yes to House Bill 101 and supporting a strengthened unemployment insurance program. North Carolina's current unemployment insurance program does not provide critical assistance to laid off workers and their families. In fact, the state ranks the worst in the nation. Currently, North Carolina ranks the 51st lowest state for receiving unemployment benefits, providing barely \$200 a week to jobless workers to survive. Unemployment insurance is an anti-poverty tool which can be leveraged to lift populations, especially vulnerable populations, out of poverty to improve health equity. This legislative solution is supported by these reasons.

The first is that studies have shown that strengthened unemployment insurance improves health outcomes. Studies show an increased likelihood of having or maintaining health insurance and higher Medicaid enrolment. There is also increased likelihood that unemployed workers take advantage of preventive health services, routine check-ups, and exams.

The second reason is that unemployment insurance provides people with support, connections to job searches, and opportunities to build work skills. It also counteracts negative feelings associated with job loss and long-term unemployment, which is crucial for maintaining mental health.

Finally, unemployment insurance substantially decreases poverty rates amongst the unemployed populations. Studies show that a more adequate wage replacement and longer duration from unemployment insurance programs improves overall health and well-being. This improvement in livelihood can lead to improved poverty rates.

The estimated costs of this policy include increasing duration and amount of benefits from the state and federal government. We need a solution to fortifying the unemployment insurance program in North Carolina. Please join me in saying yes to House Bill 101 as a solution to improve health outcomes for vulnerable communities through unemployment assistance. Thank you for your time. At the end of this presentation, I welcome any questions anyone on the committee may have.

Slide 8:



Slide 8 Narrative:

Research suggests that programs that provide education, training, and support services help create sustained employability. (Mitchell, 2018). The North Carolina Office of State Human Resources (NCOSHR) encourages all agencies to engage in workforce planning and development and provides services and tools to develop and implement ongoing Workforce Planning Programs (NC Office of State Human Resources, 2007). Workforce Planning is an effort to develop and sustain a high performing workforce which will benefit both workers and businesses (NC Office of State Human Resources, 2007).

We plan to increase employment opportunities, and thus decrease poverty and improve economic stability, for Cumberland County residents by utilizing the Workforce Planning Programs tools and actively partnering with additional employers to increase training and job opportunities for under- and unemployed residents of Cumberland County. Our Program

includes two components: employer engagement and services and support. We first plan to promote employer leadership by engaging businesses which employ high numbers of Cumberland County residents such as Goodyear Tire and Walmart. We will use Workforce Planning to gauge the hiring needs of individual employers through the utilization of tools to analyze turnover trends and data, gaps in employment and competency, and identification of positions most difficult to fill. Our second component, services and support, involves partnering with stakeholders such as NC Works Career Center, in order to provide employment assistance. This will involve working with individuals to increase their skillset and educational attainment, as well as providing services such as skills assessment, resume writing and financial assistance. Also, we will provide opportunities for businesses to connect with skilled individuals, based upon employer data that we gathered using our Workforce Planning assessments.

Slide 9:



Pitch to Cumberland County NC Works Career Center

- ❖ Assists job seekers with resources and tools such as skills assessment, resume writing, job training, and financial assistance with further educational attainment
- ❖ Seeks to help local businesses find, train, and retain qualified employees
- ❖ Interim Director: Tracy Jackson
 - ❖ HOPP aligns with NC Works' mission and vision of *"fostering an efficient workforce development system that develops skilled talent to meet the needs of both workers and businesses to achieve and sustain economic prosperity."* (NC Works Commission, n.d.)
 - ❖ NC Works values connecting with organizations in the community to develop employment and training partnerships (Workforce Development Board, 2017).
 - ❖ Will contribute: experience in collaboration efforts, knowledge of processes necessary to implement program, existing connections with businesses and community members, high interest, as our programs aligns with their mission
 - ❖ Will potentially gain: new partnerships with businesses in the county, greater exposure of their services in community and thus more people helped, utilization of tools from NC Office of State Human Resources and potential future collaboration

(Community Health Needs Assessment, 2019; Cumberland County NC Works Career Center, 2017; NC Works Commission, n.d.; SOTCH Report, 2019; Workforce Development Board, 2017.)

Slide 9 Narrative:

The Cumberland County NC Works Center assists job seekers with resources and tools such as skills assessment, resume writing, job training, and financial assistance with further educational attainment (Cumberland County NC Works Career Center, 2017). In addition, the Center aims to help local businesses find, train, and retain qualified employees (Cumberland County NC Works Career Center, 2017).

Director Tracy Jackson, we appreciate you taking the time out of your schedule to meet with us. We would love to discuss with you why we believe that NC Works Career Center would be a tremendous asset to our program and would make an excellent partner. Currently, the percentage of people living at or below the 200% federal poverty level within Cumberland County is 17% and the median household income for Cumberland County is significantly lower than that of NC as a whole (SOTCH Report, 2019). Furthermore, when completing community

surveys, residents of Cumberland County ranked higher paying employment as the issue needing most improvement within the county, and low income/poverty was chosen as the greatest issue which affected quality of life (Community Health Needs Assessment, 2019). This is an emergent issue, but we truly believe that we can help increase economic stability within the county with your help.

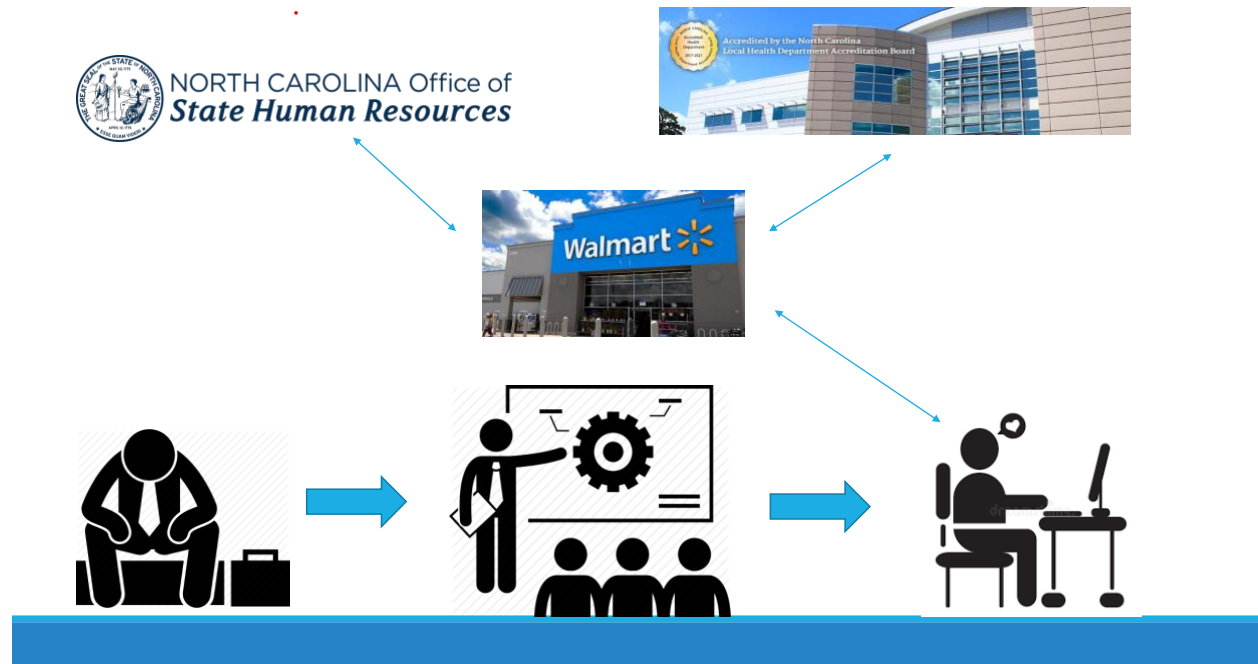
Our goal is to implement a Workforce Planning Program, following the model set forth by the NC Office of State Human Resources, which will involve working with employers to analyze and understand their individual hiring and staffing needs, and providing services and resources to individuals such as skills assessment, job training, and financial assistance. We will strive to connect businesses with skilled individuals, which will not only assist in the attainment of reliable and sustainable employment for residents of Cumberland County, but will help businesses to improve the quality of their workforce. Our mission strongly aligns with that of your organization- to *"foster an efficient workforce development system that develops skilled talent to meet the needs of both workers and businesses to achieve and sustain economic prosperity."* (NC Works Commission, n.d.).

We also acknowledge the value of partnering with diverse stakeholders in the community with shared vision, who bring unique talents, experience, resources and knowledge to the table, which we recognize is one of the tenets of the NC Works organization as well. We believe that NC Works can contribute invaluable experience gained from years of working with other businesses and organizations to provide services to the community. Coupled with this is knowledge of implementation processes and how to navigate through the logistics of actually connecting individuals to needed resources. NC Works also possesses a network of working partnerships with organizations in Cumberland County which would benefit in potential

expansion of our program. Through this network, more organizations that connect with our mission will possibly join our program and become stakeholders. As a result, we could potentially help a greater number of people.

In the same way, through partnering with us, NC Works can gain new partnerships with businesses in Cumberland County who participate in our program. Moreover, dissemination can often be an issue which prevents people in communities from knowledge of and access to services. Our partnership could help with spreading knowledge in Cumberland County communities about the NC Works Career Center and the services and resources that are offered. Thus, more people who truly need assistance could be helped. Last, you could benefit from utilization of the tools that the NC Office of the State Human Resources has provided, which could spearhead future projects for NC Works. We hope that you decide to partner with us as a stakeholder, and we look forward to the difference that we can make together!

Slide 10:



Slide 10 Narrative:

Walmart representatives, thank you for being here today. I want to take a moment to explain to you the value and importance of engaging with us in this initiative. As a backdrop, the unemployment and poverty rates in Cumberland County are higher than in the rest of the state. We believe our initiative can help decrease those numbers, with support from stakeholders like you. First, your company employs over 1000 residents of Cumberland County (Cumberland County Department of Public Health, 2016), making you a significant economic influence in the community. Second, we know your workforce needs are diverse, with employees across the job task spectrum, from stockers to high level managers. This understandably makes for complex hiring and workforce management needs. Fortunately, the NC Office of State Human Resources already provides workforce planning tools that can help you better understand your employment

needs and get the right people into the right positions when you need them, also helping design the appropriate training for intended positions. Once you have that knowledge, as a business operating locally in Cumberland County, you can boost the economy and well-being by increasing your hiring of well-trained individuals who are more likely to stay in their work positions. Although engaging in this initiative may necessitate more of your time and energy on the front end, ideally this initiative will help identify and train individuals into fitting positions to reduce the likelihood of them quitting or being let go in the future. Finally, this initiative is not a one-way street. The State Office will be available to you in an ongoing fashion for consultation, support, and problem solving. We hope you will consider the value of your involvement and how together we could improve the economic well-being of Cumberland County.

Slide 11:

Expanded Food and Nutrition Education Program (EFNEP) Overview



- ✓ EFNEP is an evidence-based nutrition education program for low-income families developed by the USDA
- ✓ EFNEP operates through land grant recipients that work with community partners to deliver the program
- ✓ Areas of program focus include:
 - Diet and physical activity
 - Food safety
 - Food resource management/budgeting
 - Food security
- ✓ Estimated Cost to Cumberland County Dept. of Health:
 - \$65,000-\$75,000 Annually = salary for staff member + contingency funds

Key Stakeholders



(USDA, 2020; USDA, n.d.; NCEFNEP, n.d.; FRAC, 2017; Wilcox et al., 2018; Cumberland County Department of Public Health, 2019)

Slide 11 Narrative:

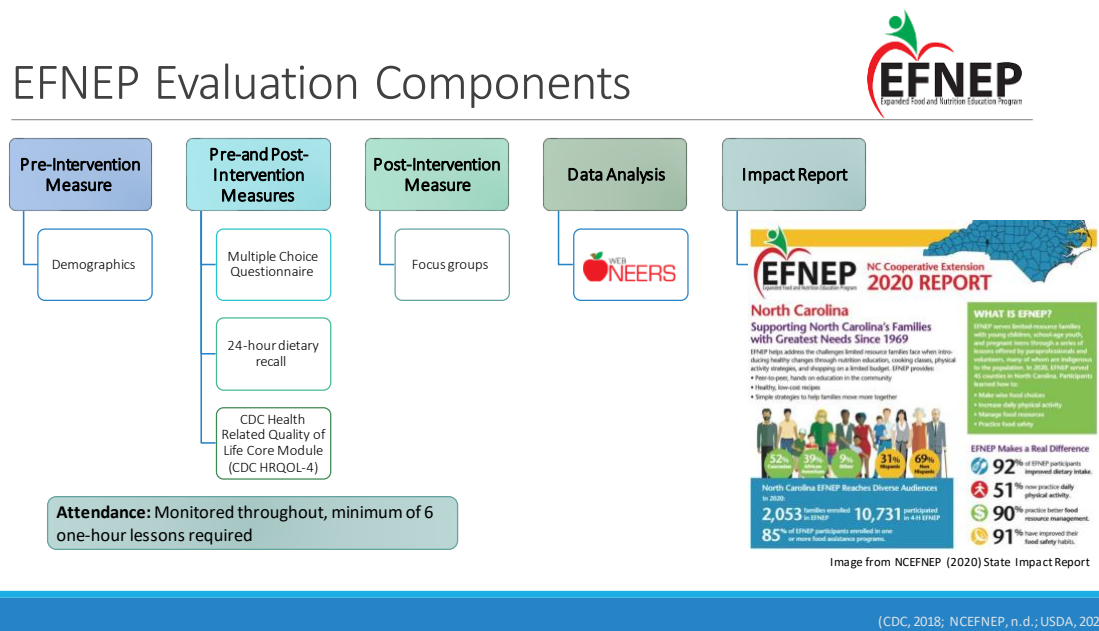
Thank you to Cumberland County Department of Health for joining us, we will now review the nutrition program in our ACC. The Expanded Food and Nutrition Education Program (EFNEP) provides evidence based education to low-income families to address diet quality, physical activity, food safety, food resource management and food security (USDA, 2020).

Poverty is associated with food insecurity and poor diet quality, which can lead to an increased risk of poor health outcomes, this is why EFNEP was chosen for our ACC (FRAC, 2017; Wilcox et al., 2018). EFNEP uses a community based approach and has a history of success across NC (USDA, 2020; NCEFNEP, 2020).

Funding is provided from the USDA to NC State University, a land grant recipient. Although NC State provides the bulk of funding, staff and materials, we estimate the health department will need one staff member to assist with program operations. An annual

budget of \$65,000-\$75,000 would cover salary and provide contingency funds. Other key stakeholders include Action Pathways which runs the Second Harvest Food Bank, volunteers and community members. (USDA, 2020; NCEFNEP, 2020; Cumberland County Department of Public Health, 2019).

Slide 12:



Slide 12 Narrative:

Evaluation consists of pre and post intervention tools to assess behavior change, all administered by trained program staff. First, demographics are collected and attendance is monitored throughout (USDA, 2020).

The pre and post intervention questionnaire, developed by the USDA, is the main form of evaluation. The questionnaire contains multiple choice food frequency, physical activity, food budgeting, food safety and food security questions. Outcomes include improvements in each of these areas from pre to post intervention, diet and physical activity are evaluated using current national recommendations (USDA, 2020). A 24 hour diet recall serves as a second measure of dietary intake.

The CDC Health Related Quality of Life core module measures self-reported quality of life and is given at the same time as the questionnaire. The quality of life measure is a valid

indicator of program outcomes, is related to self-reported chronic disease and a strong predictor of morbidity and mortality (CDC, 2018).

A post intervention focus group of about 10-15 randomly selected participants will gather qualitative data and program feedback.

Data is entered and analyzed in WebNEERS, the national data collection system for EFNEP. Impact reports are then generated to summarize program reach – here we have a sample 2020 NC impact report (USDA, 2020; NCEFNEP, 2020).

Slide 13:

EFNEP Evaluation: Strengths and Limitations



Strengths

- Validated assessment tools
- Existing data management system
- Pre-and Post-Intervention data
- Qualitative data included

Limitations

- Self-reported data
- Attendance must be closely monitored
- Lack of extended follow up

(USDA, 2020; USDA, 2013; CDC, 2018; Willett, 2012)

Slide 13 Narrative:

The strengths of this evaluation include existing valid assessment tools and data management system, pre and post intervention measures, and including qualitative data (USDA, 2020; USDA, 2013).

Limitations include self-reported data may lead to over or underreporting behaviors (Willett, 2012). Participants need to complete at least 6 one hour lessons to receive enough education so attendance must be watched closely. Currently there is a lack of long term follow up, this is why the quality of life measure is used which is a strong predictor of morbidity and mortality (CDC, 2018).

EFNEP aims to promote health equity by creating an opportunity for low income families to improve their health and nutrition.

Slide 14:



The components of HOPP work together to provide a sustainable plan to improve economic stability and health in the vulnerable low-income population of Cumberland County



With your support we can HOPP to a healthier Cumberland County!

Concluding Remarks

Slide 14 Narrative:

In conclusion, the components of HOPP work together to provide a sustainable plan to improve economic stability and health in the vulnerable low-income population of Cumberland County.

Thank you to all of our stakeholders for joining us today, and with your support we can HOPP to a healthier Cumberland County!

Slide 15:



Questions

Slide 15 Narrative:

We welcome any questions you may have regarding our ACC.

Slide 16:

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Slide 16 Narrative:

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APPENDIX C – EISENMANN DELIVERABLES

PROBLEM STATEMENT

Social Determinant of Health (SDOH) of Interest

Healthy People 2030 defines Social Determinants of Health (SDOH) as "...the conditions in the environments where people are born, live, learn, work, play, worship, and age that affect a wide range of health, functioning, and quality-of-life outcomes and risks" (ODPHP, 2020). The SDOH includes neighborhood characteristics, healthcare access, education, social context, and economic stability. Several factors fall under the umbrella of economic stability and a key objective of this SDOH is to "reduce the proportion of persons living in poverty" (ODPHP, 2020). Poverty is linked to many health disparities, including a greater risk of chronic disease, food insecurity, and other hardships including, housing and competing priorities (i.e., choosing between paying for utilities or food) (FRAC, 2017). Research has shown that those with greater economic stability tend to have better health outcomes than those with lower economic stability (Chetty et al., 2016; Pollack et al., 2007). Economic stability and opportunity in the short term can provide security for needs such as healthy food, safe housing, transportation, the ability to pay medical expenses, higher quality education, and less chronic stress associated with financial worry (RWJF, 2018). Those with economic instability may struggle to provide these basic needs for themselves and their families (RWJF, 2018).

Geographic and Historical Context of Cumberland County, NC

Cumberland County is located in southeast North Carolina with an estimated population of 335,509 (US Census Bureau, 2019). In terms of racial and ethnic diversity Cumberland County is 42.4% White, 39.1% Black and 12.1% Hispanic or Latinx (US Census Bureau, 2019). Most residents over the age of 25 have a high school diploma (90.3%) and have some form of health insurance (89.2%) (Cumberland County Department of Public Health, 2019). Portions of Fort Bragg are in Cumberland County and therefore there is a high military (10.1%) and veteran population (19.8%) (see Appendix C.1, Table C.1) (Cumberland County Department of Public Health, 2019).

Economically Cumberland County performs poorly on several indicators compared to North Carolina as a whole. In Cumberland County the overall population in poverty is 17.6% and children in poverty is 25.7%, both higher than North Carolina (16.8% and 23.9% respectively) (Cumberland County Department of Public Health, 2019). Median income in Cumberland County is also lower than North Carolina (\$45,716 and \$52,413 respectively), and unemployment is at 5.1% compared to 3.9% for the state overall (see Table C.2, Appendix C.2 for economic comparisons) (Cumberland County Department of Public Health, 2019). Current plans to address economic instability in the county include supporting low-income families in gaining healthcare access, expanding transit options in rural communities, and revitalize the community to create jobs (Cumberland County Department of Public Health, 2020). The economic goal outlined by the report is to reduce the number of people living in poverty from 17% to 10% (Cumberland County Department of Public Health, 2020).

Cumberland County does have a host of assets for its residents. The top employers in the area are the Department of Defense (Fort Bragg), Cape Fear Valley Health Systems, the school

district, Wal-Mart, Goodyear, county government and the city of Fayetteville (Cumberland County Department of Public Health, 2019). There are also organizations to assist with housing, food, mental health, and financial supports for residents (Cumberland County, 2017). Feeding America (2021) also has the Second Harvest Food Bank of Southeast NC in Fayetteville.

Priority Population

The county's priority population would be families, including those with children, living in poverty, defined by at or below 200% of the Federal Poverty Level (FPL). The city of Fayetteville is of interest due to scoring a 96.8 out of 100 on the SocioNeeds Index, which is a combination of income, poverty, unemployment, occupation, educational attainment, and linguistic barriers that lead to poor health outcomes (Cumberland County Department of Health, 2019). Fayetteville has the lowest median income from all county zip codes at \$24,409 and a poverty rate of 19.2% (see Appendix C.2, Table C.2) (Cumberland County Department of Health, 2019; US Census Bureau, 2019). Among the population living at or below poverty in Cumberland County, many are female (18.2%), unemployment is high (14.8%), and many who work still live in poverty (37.8%) (see Appendix C.3, Table C.3) (Cumberland County Department of Public Health, 2020).

Measures of Problem Scope

Living in poverty puts individuals and families at risk for experiencing poorer health outcomes and conditions, including food insecurity, chronic disease and obesity (FRAC, 2017; Levine, 2011). Over the past 25 years researchers have noted an increasing trend in the relationship between income and health, finding lower income to be correlated with higher rates of obesity and diabetes (Bentley et al., 2018). Poverty early in life can put children at risk for subsequent obesity in adolescence, increased risk of poverty later in life, adverse childhood

experiences (ACEs), poor mental health and long-term economic impacts such as higher healthcare expenditures and lower earnings in adulthood (Lee et al., 2014; Min et al., 2018. FRAC, 2017). Factors such as low-income and unemployment put families at risk for experiencing food insecurity, due to having limited funds to buy food (ODPHP, 2020). Adults with food insecurity have a greater prevalence of obesity, likely due to lower consumption of fruits and vegetables and overconsumption of cheaper energy-dense low nutrient foods, as well as strained economic resources for food (Pan et al., 2012; FRAC, 2017). Within Cumberland County there are high rates of poverty (17.6%) and obesity (34%) (Cumberland County Department of Health, 2019). Obesity is a risk factor for kidney disease, osteoarthritis, and Rheumatoid arthritis, which are increasing among the Medicare population in Cumberland County (CDC, 2020; Kovesdy et al., 2017; Cumberland County Department of Public Health, 2019). Compared to North Carolina, Cumberland County has higher maternal pre-pregnancy weight ($\geq 25 \text{ kg/m}^2$), greater levels of food insecurity and a lower Food Environment Index (see Appendix C.4, Table C.4) (State of the County Health Report, 2020; PRAMS, 2017; Feeding America, 2018).

Rationale/Importance

Economic stability is a key SDOH within Cumberland County. As seen from the data, poverty (including childhood poverty), unemployment, and food insecurity are all higher in Cumberland County than in North Carolina. Families living in poverty, including those with children, may be at increased risk of poor health outcomes and long term economic hardships (FRAC, 2017; Bentley et al., 2018; Levine, 2011). Families living in Fayetteville have some of the highest poverty rates within the county and may be at risk for experiencing these poor health

outcomes, so they are an especially vulnerable population of focus (Cumberland County Department of Public Health, 2019).

Disciplinary Critique

Economic stability and reducing poverty is essential to achieve health equity which can be defined as “...everyone has a fair and just opportunity to be as healthy as possible...” (RWJF, 2017). From a public health nutrition perspective, Cumberland County lacks opportunities for low-income families to easily access nutrition education. Creating opportunities for low-income families to improve health behaviors associated with chronic disease risk is one step toward health equity. A focus on reducing poverty and achieving health equity will help families in the short term and potentially impact future generations, breaking the cycle of poverty and poor health outcomes (RWJF, 2018).

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APPENDIX C.1

Table C.1. Demographic Characteristics of Cumberland County, North Carolina

Demographic Characteristic	Percent of the Population
<i>Race and Ethnicity</i>	
White, non-Hispanic	42.4%
Black or African American	39.1%
Hispanic or Latinx	12.1%
Asian	2.7%
American Indian and Alaska Native	1.9%
Two or more races	4.8%
<i>Military and Veteran Population</i>	
Active Military	10.1%
Veteran	19.8%
<i>Education*</i>	
High School Degree or Higher	90.3%
Bachelor's Degree or Higher	24.1%
<i>Insurance Coverage</i>	
Insured	89.2%
Uninsured	10.8%

*Education is determined by individuals 25 or older

(US Census Bureau, 2019; Cumberland County Department of Public Health, 2019)

APPENDIX C.2

Table C.2. Economic Status of Cumberland County Compared to North Carolina

Economic Measure	Cumberland County	North Carolina
<i>Poverty, <200% Federal Poverty Level (FPL)</i>		
Overall population	17.6%	16.8%
Children in poverty	25.7%	23.9%
People 65+ in poverty	10.2%	9.7%
<i>Income</i>		
Median Income	\$45,716	\$52,413
Lowest zip code, 28301	\$24,409	N/A
Highest zip code, 28308	\$114,861	N/A
<i>Employment Status</i>		
Unemployment	5.1%	3.9%

(Cumberland County Department of Public Health, 2019)

APPENDIX C.3

Table C.3. Key Statistics Among Cumberland County Population Living in Poverty (at or below 200% Federal Poverty Level)

Measure	Percent (%)
Females	18.2%
Unemployment	14.8%
Working and still live below poverty	37.8%
Native American/Alaska Native Families	29.8%

(Cumberland County Department of Public Health, 2020)

APPENDIX C.4

Table C.4. Health Measure Comparisons Between Cumberland County and North Carolina

Health Measure	Cumberland County	North Carolina
Premature death*	9,400	7,700
Poor to Fair Health (%)	19%	18%
Adult Obesity (%)	34%	31%
Mothers Pre-Pregnancy Weight ≥ 25 kg/m ²	56.5%	54.4%
Babies with Low Birth Weight / Very Low Birth Weight	9.9% / 2.1%	9% / 1.7%
Food Environment Index**	6.0	6.7
Food Insecurity Overall (%)	16.9%	14%
Food Insecurity, Child (%)	22.8%	19.3%
Chronic Kidney Disease, Medicare Population (%)	22.4%	19%
Rheumatoid Arthritis or Osteoarthritis, Medicare Population (%)	33.8%	29.1%

* Years of potential life lost before age 75 per 100,000 population (age-adjusted).

** Index of factors that contribute to a healthy food environment, from 0 (worst) to 10 (best).

(Cumberland County Department of Public Health, 2020; County Health Rankings, 2020; Feeding America, 2018; PRAMS, 2017)

POLICY AND PROGRAM ANALYSIS

Background Information

A key objective of the SDOH, economic stability is to "reduce the proportion of persons living in poverty" (ODPHP, 2020). The priority population of focus in Cumberland County is families living at or below 200% of the Federal Poverty Level (FPL). Poverty is associated with poor nutrition outcomes including food insecurity and diet quality (FRAC, 2017; Wilcox et al., 2018). Strained economic resources for food may limit fruit and vegetable consumption and increase consumption of low nutrient foods associated with poor health outcomes such as obesity (Pan et al., 2012). Poverty and food insecurity can lead to chronic disease and mental health problems in adults and children (FRAC, 2017). Factors that contribute to food insecurity include income, employment status and access to nutritious foods in a given neighborhood (ODPHP, 2020). Resources in Cumberland County that can help address poverty and food insecurity in low income families include the local health department, non-profits and community organizations serving low income residents, such as food banks.

Purpose

A proposed program to help improve health among low income (< 200% FPL) families in Cumberland County is to implement the Extended Food and Nutrition Education Program (EFNEP) developed by the United States Department of Agriculture (USDA) (USDA, 2020). The goal of EFNEP is to provide nutrition, food resource management, physical activity and food safety education to low income families to help improve health behaviors and food security (USDA, 2020). The decision to implement the EFNEP in Cumberland County was considered alongside expanding Supplemental Nutrition Assistance Program (SNAP) benefits. The

community based approach of EFNEP fit within the goals of the ACC more-so than SNAP (see Appendix C.5 for a review of the SNAP policy option).

Strategies and Activities: EFNEP Program

Residents from focus groups during the most recent Community Health Needs Assessment had interest in learning more about nutrition, weight and exercise (Cumberland County Department of Health, 2019). EFNEP has a long history of success among low-income participants (USDA, 2020). Nationally 90% of adult and 80% of child EFNEP participants report improved behaviors following the program (USDA, n.d.). EFNEP has also shown to improve diet quality and increase food security (Perkins et al., 2020; Crouch et al., 2017). Poor diet quality, food insecurity and poverty can put individuals at risk for poorer health outcomes, including obesity (FRAC, 2017). In North Carolina 92% of EFNEP participants reported improved diet quality, 51% practice physical activity, 90% have better food resource management and 90% have improved food safety habits (NCEFNEP, 2020).

EFNEP uses a community based approach to target nutrition and health behaviors in low income families (USDA, 2020). The program operates through cooperation between community partners and land grant universities (USDA, n.d.). In North Carolina, NC State University (NC State) is a land grant recipient that partners with organizations across North Carolina to implement EFNEP. For NC State to provide funding for EFNEP in Cumberland County the Cumberland County Department of Public Health (CCDPH) needs to apply for a partnership through the NC Cooperative Extension (NCEFNEP, n.d.). Once NC State partners with the CCDPH, EFNEP can operate within the county. NC State provides the staff to deliver the program, evidence based materials, impact reports, equipment needed for program delivery and participant materials (NCEFNEP, n.d.). The CCDPH provides the facility for the program,

participants, additional supplies needed for food demonstrations, time, contact person and possibly additional volunteers (NCEFNEP, n.d.).

Collaboration with Action Pathways, which runs the Second Harvest Food Bank of Southeast NC, is an important partnership for the CCDPH because the food bank is an existing resource for food insecure families. The flexibility to tailor the program to the community is appealing to ensure low income families receive the tools to improve health, delivered through trusted partners. In 2020, 65,140 individuals viewed nutrition information on social media pages run through EFNEP or county health departments, adding an additional media outlet to share information with participants and the wider community (NCEFNEP, 2020).

Participation in EFNEP influences the individual level of the socioecological framework (SEF) through behavior change, the interpersonal level through shared resources in families, and the community level through the coordination of community organizations to deliver the program (USDA, 2013).

The EFNEP program in North Carolina reached 2,053 families in 2020 (NCEFNEP, 2020). Partnerships with existing organizations that already support low income families (i.e., Action Pathways) can help connect EFNEP to the community. A goal within the first year of program implementation would be to provide direct programming to 1,000 individuals. This goal is an estimate based off 2020 program data for the county with a similar demographic profile, Forsyth County, NC, which reached 1,356 individuals (NCEFNEP, 2020). Forsyth County has a population of 382,295 and a poverty rate of 15.2%, whereas Cumberland County has a population of 335,509 and poverty rate of 17.6% (Cumberland County Department of Public Health, 2019; US Census Bureau, 2019).

Long-Term Impact

Long-term impact of EFNEP in Cumberland County includes a decrease in the proportion of families in Cumberland County experiencing food insecurity and an improved quality of life. Improvement in food security is beneficial because of the link between food insecurity and poor health outcomes, such as chronic disease and obesity (FRAC, 2017).

Short-Term Outcomes

The short-term outcome of EFNEP in Cumberland County is to improve health behaviors, with at least 90% of participants experiencing an improvement in one or more of the four core areas of the program from pre to post intervention. These focus areas include diet and physical activity, food resource management, food safety and food security (USDA, 2013).

Stakeholders

Stakeholders for EFNEP include the CCDPH, NC State, Action Pathways, other community organizations and community members. NC State is the main stakeholder responsible for providing program funding, staff and curriculum (NCEFNEP, n.d.). The CCDPH is the primary liaison between NC State staff and the community and is responsible for supporting program implementation and raising awareness of EFNEP to community organizations and eligible residents (NCEFNEP, n.d.). Community organizations that serve low income residents have an important role of encouraging eligible residents to sign up for the program (see Table C.5, Appendix C.6 for potential community partners). Participants of the program are essential to include in conversations about strengths and areas for improvement.

Budget

Funding for EFNEP is from the USDA and is allocated to land grant universities. In FY 2020, NC State received just over \$2.6 million in funding for EFNEP programming across North

Carolina (USDA, 2020). Fundraising from local organizations amounted to \$648,141 in 2020 to support programming (NCEFNEP, 2020). National level data shows the maximum average cost per participant of the EFNEP program in North Carolina is approximately \$376 (Baral et al., 2013).

Conclusion, Advantages/Disadvantages

The advantages of EFNEP include the community based approach and ability to involve already trusted partners. EFNEP has a history of success among low income families in North Carolina and across the country (USDA, 2020; NCEFNEP, 2020). Materials and curriculum for the program are evidence-based and consistent with USDA guidance for diet and physical activity (USDA, 2020). This is a benefit of the program because the CCDPH does not need to develop a curriculum, saving time and money.

There are several challenges accompanying EFNEP in Cumberland County. For example, the CCDPH needs to develop a partnership with NC State for funding. Additional fundraising may also be needed to support the program. EFNEP does not have as wide of a reach compared to a policy option, such as increasing SNAP benefits, however, EFNEP would focus solely on the families in the county.

EFNEP in Cumberland County creates an opportunity for low income families to access nutrition and physical activity education, food resource management strategies, food safety tips and improve food security status (USDA, 2020). Through a community based approach, the program can adapt to community needs. The evidence based EFNEP curriculum aims to create an opportunity for low income families to improve their nutrition and health, thus promoting health equity (USDA, 2013).

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APPENDIX C.5

Review of Supplemental Nutrition Assistance Program (SNAP) Expansion as a Policy Option

Purpose

A policy option to help address poverty among low income families in Cumberland County is to increase Supplemental Nutrition Assistance Program (SNAP) benefit allotments. The goal of increasing SNAP benefits is to help alleviate cost as a barrier for families to access healthy foods ultimately to reduce food insecurity.

Strategies and Activities: SNAP Benefit Increases

Increasing SNAP benefits would need to be implemented at the federal level. Implementation of increased SNAP benefits would require lobbying efforts from local and state level officials as well as organizations such as the United Way and Feeding America which have direct ties to the Cumberland County community. Lobbying efforts would involve developing elevator pitches, fact sheets, policy briefs and attending events on Capitol Hill to have the opportunity to speak with law makers in Congress.

SNAP is the largest program nationally aimed at reducing food insecurity. Food insecurity has been shown to result in poor health outcomes (FRAC, 2017). Also in 2011, SNAP benefits were increased to help in times of economic hardship (Rosenbaum et al., 2020). The increased SNAP benefits were shown to lessen food insecurity (Rosenbaum et al., 2020). Currently SNAP benefits have been increased temporarily by \$102 per month due to the COVID-19 pandemic until June of 2021 (FNS, 2021). SNAP allotments are based on the Thrifty Food Plan (TFP) designed by the USDA to be a low-cost nutritious meal plan. However, the time it takes to prepare the meals on the TFP outweigh the time many low-income families have to prepare meals (Carlson, 2019). Increasing benefit allotments will provide families with extra

funds to be able to purchase healthy food options that may be more expensive but are quicker to prepare (i.e. canned beans instead of dry beans). Evidence also shows that increases in SNAP benefits can help reduce childhood poverty, help improve health and decrease healthcare costs (Carlson, 2019).

Increasing SNAP benefits would operate on the national level of the socioecological framework (SEF). Since the SNAP program is federally funded it has wide reach across the US. Families receiving benefits would be provided more opportunity to purchase healthy food options by reducing cost as a barrier.

Increases in benefits would impact over half of the families with children in Cumberland County, since 54.9% are receiving SNAP benefits (Cumberland County Department of Health, 2019). This intervention would impact over 1.3 million North Carolina residents, most of which are living in poverty and 38 million American's nationwide (Hall, 2021).

Outcomes

Long term impact of increasing SNAP benefit allotments include a decreased percentage of low-income families experiencing food insecurity. A short term goal includes decreasing food insecurity among low income families in Cumberland County from 16.9% to 14% (NC state average) within 2 years of benefit increase (Feeding America, 2020).

Stakeholders

Stakeholders involved to increase SNAP benefits include local and state health departments, non-profit organizations, policy makers (senators and congressmen), and lobbyists. These stakeholders would be responsible for coordinating lobbying efforts.

Budget

The cost to increase SNAP benefits would be vast. The most recent stimulus package included \$13 billion toward 15% SNAP benefit increases for a six month period (Reinicke, 2020). Sustaining the increase to match the current amount past the 6 month period would require additional \$26 billion in funds per year.

Advantages/Disadvantages

The advantages of expanding SNAP benefits include the wide reach of the program and aid in reducing food insecurity. Disadvantages include the time it would take to implement the policy and the funding required to do so. Additionally, it is unknown how increases in benefit allotments will impact diet quality and health outcomes. Due to the cost, disconnect from the community directly and unknown improvements in health outcomes, the SNAP expansion policy was not selected to move forward with when compared to the EFNEP program.

APPENDIX C.6

Table C.5. Potential community organizations to include in Expanded Food and Nutrition Education Program (EFNEP) implementation in Cumberland County

Community Organizations in Cumberland County
United Way of Cumberland County
WIC – Cumberland County
Places of Worship
YMCA
American Red Cross
Hands Delivering Help, Inc.
The Salvation Army
ALMS House, Inc.
Operation Blessings of Fayetteville, Inc.

(Cumberland County, 2017)

IMPLEMENTATION AND EVALUATION PLAN

Intervention Summary

A key objective of the Social Determinant of Health (SDOH), economic stability, is to “reduce the proportion of persons living in poverty” (ODPHP, 2020). Poverty is associated with poor health outcomes including food insecurity and chronic disease (FRAC, 2017; Oates et al., 2017). The USDA’s Expanded Food Nutrition Education Program (EFNEP) operates through land grant universities to bring health and nutrition education to low-income families (USDA, 2020). EFNEP uses evidence-based curriculum to target the following behaviors; diet quality and physical activity, food resource management, food safety, and food security (USDA, 2013). Short-term outcomes of the program are to show improvements in these areas from pre to post intervention. EFNEP influences the individual level of the socioecological framework through behavior change, the interpersonal level through shared resources in families, and the community level through the coordination of community organizations to deliver the program (USDA, 2013). Long-term goals of EFNEP are to improve food security and health outcomes, such as chronic disease risk, which is closely linked to diet and physical activity (CDC, 2020).

Program Outcomes

As mentioned, the EFNEP short-term outcomes include participant improvements in diet quality and physical activity, food resource management, food safety, and food security (USDA, 2013). Evaluation of Cumberland County EFNEP also includes a self-reported quality of life measure, demographic information and participant attendance (see Appendix C.7, Table C.6 for EFNEP components and measurements) (CDC, 2018).

Study Design/Data Collection Methods

The adult program curriculum is Families Eating Smart and Moving More (FESMM), containing total of 21 lessons; participants must complete at least six lessons to see an impact (USDA, 2020). Sessions take place once a week for one hour, therefore, participants may be in the program for a minimum of six weeks or a maximum of 21 weeks.

EFNEP established evaluation allows for wide scale program monitoring (USDA, 2020). The main form of evaluation consists of a pre and post-intervention questionnaire developed by the USDA and administered by EFNEP program staff (USDA, 2020). The adult questionnaire includes food frequency, physical activity, food safety, and food budgeting/resource management questions in a multiple-choice format (USDA, 2020). For a secondary dietary intake adults participate in a 24-hour diet recall at baseline and exit of the program (USDA, 2020). In addition, the program staff collects demographic data on all participants, including factors such as age, gender, race, ethnicity, and income to measure reach and diversity (USDA, 2020). Quality of life is also measured to evaluate program outcomes. The CDC Healthy Days Core Module (CDC HRQOL-4) uses four questions to measure self-reported quality of life which is a valid indicator of intervention outcomes and a strong predictor of morbidity and mortality (see Appendix C.8 for HRQOL-4 questions) (CDC, 2018).

Qualitative data includes focus groups post intervention. Staff from CCDPH will facilitate the focus group in a mutually agreed upon convenient location, such as a community center or the local food bank. Timing of evaluation includes baseline measures of demographic information, questionnaire on health behaviors, 24 hour diet recall and CDC HRQOL-4 measures. Exit of the program includes completing the questionnaire on health behaviors, 24 hour diet recall, CDC HRQOL-4 and focus groups.

Sample and Sampling Strategy

Eligible program participants in Cumberland County include families living at or below 200% of the FPL), including parents, caregivers, and expecting parents, all of whom care for children (Cumberland County Department of Health, 2019; USDA, 2020). Enrollment requires participants to complete all evaluation measures except focus groups. Randomly selected participants (between 10-15) are invited to focus groups and must provide consent to participate.

Measures

Outputs include participant attendance, changes in diet consistent with federal recommendations, increases in physical activity reported from baseline to exit of the program, improvement in food resource management and budgeting, and increased knowledge of food safety measures (USDA, 2013). Attendance is tracked by program administrators and evaluation includes if participants graduated from the program (USDA, n.d.). Outcomes include improved quality of life measured by the CDC HRQOL-4, which is related to self-reported chronic disease and their risk factors, can help determine the burden of preventable disease and is a strong predictor of morbidity and mortality (CDC, 2018).

Data Analysis Plan

The pre-post program questionnaires, demographic data and 24 hour diet recalls use the Web-Based Nutrition Education Evaluation and Reporting System (WebNEERS) for analysis (USDA, n.d.). This database houses responses collected and allows program administrators to pull reports, summary statistics and show improved and changed practices. Focus group data requires qualitative data analysis using categorization and themes. Analysis of the CDC HRQOL-4 will require the program administrators to calculate a summary index of unhealthy days and use counts and percents to report out general health status (CDC, 2018).

Key Stakeholders and Engagement Activities

A primary stakeholder for Cumberland County EFNEP is NC State University (NC State). NC State provides funding, trained staff to implement and evaluate the program, the curriculum, program equipment, and develops impact reports for evaluation (EFNEP, n.d.). Partnership with NC State allows Cumberland County to implement a successful evidence-based program. An engagement strategy to connect with NC State involves a hired Program Coordinator at the CCDPH to meet with the EFNEP coordinators to showcase the health disparities in Cumberland County and how the program benefits the community.

Another important stakeholder is Action Pathways which runs the Second Harvest Food Bank in Southeast NC. Many families who participate in EFNEP are already enrolled in one or more food assistance programs (85%), and 102,000 families received nutrition and food safety information because of the partnership with emergency food distribution sites (NCEFNEP, 2020). An engagement strategy to foster collaboration with Action Pathways is to highlight that EFNEP and the food bank have a common goal, and developing a partnership is for the benefit of the community (Action Pathways, 2019; USDA, 2020). Volunteers and staff from the food bank would be valuable stakeholders to involve in focus group discussions as trusted members of the community.

Community members and participants in EFNEP are also key stakeholders. EFNEP has a community based approach and it is essential to involve the community in the evaluation of the program (USDA, 2020). Low-income families are the potential participants of the program making them a key stakeholder to connect with and tailor communication efforts toward. Engaging eligible families involves partnering with organizations that are already trusted in the community, noting the benefits of the program for families and making the program easily

accessible. Participants in the program will also be able to partake in focus groups, offering their feedback on the program.

Measure of Progress

Progress is defined as an improvement from baseline to post-intervention in self-reported diet, physical activity, food resource management, food safety, food security and quality of life. Data from the NCEFNEP (2020) indicates expected results include improved dietary intake, food resource management, and food safety habits in about 90% of participants and at least 50% of participants with improved physical activity, which is the baseline goal for Cumberland County.

Budget

Funding for EFNEP comes from the land grant awarded to NC State and additional donations raised (USDA, 2020; NCEFNEP, 2020). A full time program coordinator at the CCDPH is needed to assist with EFNEP coordination and evaluation. The budget to hire this staff member including benefits is approximately \$63,389 annually (Salary.com, 2021).

Although the bulk of funding comes from NC State, if additional supplies are needed CCDPH needs a contingency budget. An annual range of \$65,000-\$75,000 (\$325,000-\$375,000 over five years) is estimated to fund staffing and additional supplies.

Strengths and Limitations

Evaluation of EFNEP has several strengths. First, EFNEP is used across the nation and shows consistent evidence for positive behavior change (USDA, 2020). The CDC HRQOL-4 is also a valid and reliable tool for evaluation (CDC, 2018). Baseline and post-intervention data allows for a direct assessment of change. Additionally, the evaluation considers multiple measures of dietary intake through the food frequency questions on the questionnaire and the 24-hour diet recall. Trained interviewers administer 24-hour diet recalls which are relatively quick

and do not require participant literacy (Willett, 2012). Focus groups identify areas for improvement and may even highlight some unintended effects of the program, such as improved self-confidence, improved family dynamics, and improved confidence to secure employment or pursue education opportunities (USDA, 2013).

Challenges and limitations accompany these forms of evaluation. When conducting a 24-hour recall, some of the challenges include difficulty for participants to recall foods and estimate portions (Willett, 2012). Using food frequency questionnaires runs the risk of participants overestimating their intake of healthy behaviors and underestimating unhealthy behaviors (Willett, 2012). Additionally, evaluating EFNEP effectiveness relies on participants completing the correct level of education, program administrators must monitor attendance closely.

Data Dissemination

Evaluation data from EFNEP in Cumberland County will contribute to the state and national evidence base. NC State creates impact reports for each program to evaluate efforts in each county meant to be shared with stakeholders to showcase program reach and effectiveness (NCEFNEP, 2020). Data from focus groups and CDC HRQOL-4 will also be summarized and disseminated to stakeholders and participants to aid in program improvements.

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APPENDIX C.7

Table C.6. Cumberland County Expanded Food and Nutrition Education Program (EFNEP) Evaluation Components

Component of EFNEP Evaluation	Timing and Mode of Measurement	How Progress is Defined
Diet Quality*	Pre and Post Intervention Questionnaire Pre and Post Intervention 24-hour Dietary Recall	Improved dietary behaviors from baseline to post intervention consistent with current national Dietary Guidelines for Americans recommendations
Physical Activity*	Pre and Post Intervention Questionnaire	Improved reported physical activity from baseline to post intervention consistent with national physical activity recommendations
Food Resource Management*	Pre and Post Intervention Questionnaire	Improved self-reported food resource management practices from baseline to post intervention
Food Safety*	Pre and Post Intervention Questionnaire	Improved self-reported food safety practices from baseline to post intervention
Food Security*	Pre and Post Intervention Questionnaire	Improved self-reported food security status from baseline to post intervention
Quality of Life	Pre and Post Intervention CDC Health Related Quality of Life Core Module (CDC HRQOL-4)	Improved self-reported quality of life from baseline to post intervention
Focus Groups	Post Intervention Focus Groups (10-15 participants)	Used to identify participant perceptions, feelings and unintended outcomes not otherwise measured as a result of the program
Demographic Information	Pre Intervention Survey given to all participants	Used to identify reach and diversity of the program, static baseline measure
Participant Attendance	Tracked during the program at each lesson by program staff	Participants must complete at least 6 lessons to gain enough education to see an impact, tracked in WebNEERS

(USDA, 2013; CDC, 2018)

*Represents the core focus areas of EFNEP

APPENDIX C.8

Centers for Disease Control Health Related Quality of Life Healthy Days Core Module (CDC HRQOL-4) questions (CDC, 2018):

1. Would you say that in general your health is excellent, very good, good, fair or poor?
2. Now thinking about your physical health, which includes physical illness and injury, how many days during the past 30 days was your physical health not good?
3. Now thinking about your mental health, which includes stress, depression, and problems with emotions, how many days during the past 30 days was your mental health not good?
4. During the past 30 days, approximately how many days did poor physical or mental health keep you from doing your usual activities, such as self-care, work, or recreation?

INDIVIDUAL PRESENTATION SLIDES

Slide 1:

Expanded Food and Nutrition Education Program (EFNEP) Overview



- ✓ EFNEP is an evidence-based nutrition education program for low-income families developed by the USDA
- ✓ EFNEP operates through land grant recipients that work with community partners to deliver the program
- ✓ Areas of program focus include:
 - Diet and physical activity
 - Food safety
 - Food resource management/budgeting
 - Food security
- ✓ Estimated Cost to Cumberland County Dept. of Health:
 - \$65,000-\$75,000 Annually = salary for staff member + contingency funds

Key Stakeholders



(USDA, 2020; USDA, n.d.; NCFNEP, n.d.; FRAC, 2017; Wilcox et al., 2018; Cumberland County Department of Public Health, 2019)

Slide 1 Narrative:

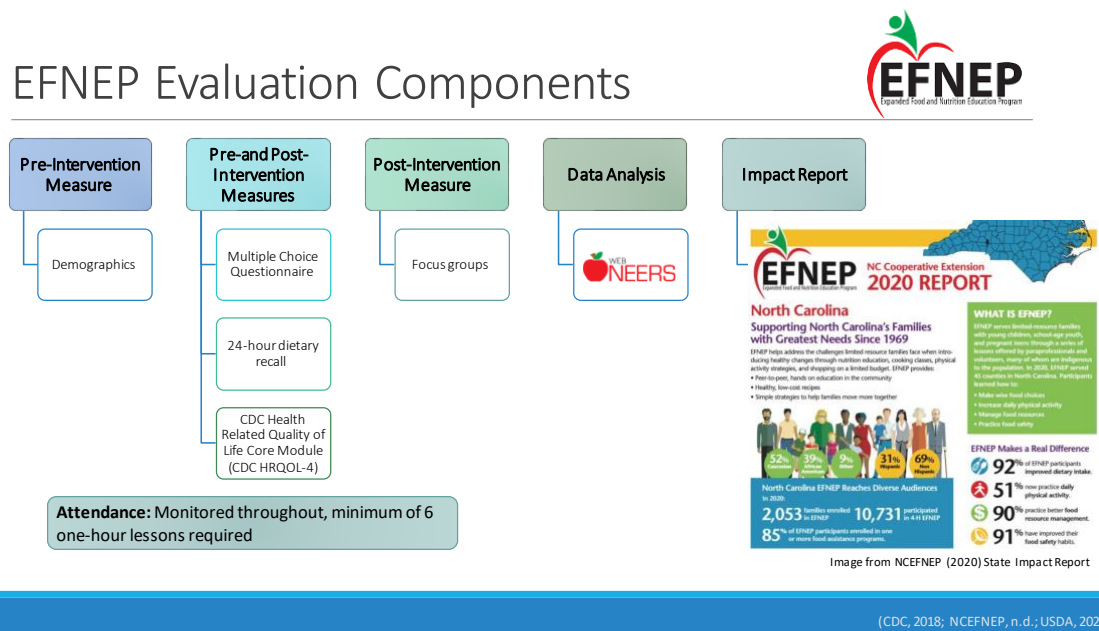
Thank you to Cumberland County Department of Health for joining us, we will now review the nutrition program in our ACC. The Expanded Food and Nutrition Education Program (EFNEP) provides evidence based education to low-income families to address diet quality, physical activity, food safety, food resource management and food security (USDA, 2020).

Poverty is associated with food insecurity and poor diet quality, which can lead to an increased risk of poor health outcomes, this is why EFNEP was chosen for our ACC (FRAC, 2017; Wilcox et al., 2018). EFNEP uses a community based approach and has a history of success across NC (USDA, 2020; NCFNEP, 2020).

Funding is provided from the USDA to NC State University, a land grant recipient. Although NC State provides the bulk of funding, staff and materials, we estimate the

health department will need one staff member to assist with program operations. An annual budget of \$65,000-\$75,000 would cover salary and provide contingency funds. Other key stakeholders include Action Pathways which runs the Second Harvest Food Bank, volunteers and community members. (USDA, 2020; NCEFNEP, 2020; Cumberland County Department of Public Health, 2019).

Slide 2:



Slide 2 Narrative:

Evaluation consists of pre and post intervention tools to assess behavior change, all administered by trained program staff. First, demographics are collected and attendance is monitored throughout (USDA, 2020).

The pre and post intervention questionnaire, developed by the USDA, is the main form of evaluation. The questionnaire contains multiple choice food frequency, physical activity, food budgeting, food safety and food security questions. Outcomes include improvements in each of these areas from pre to post intervention, diet and physical activity are evaluated using current national recommendations (USDA, 2020). A 24 hour diet recall serves as a second measure of dietary intake.

The CDC Health Related Quality of Life core module measures self-reported quality of life and is given at the same time as the questionnaire. The quality of life measure is a valid

indicator of program outcomes, is related to self-reported chronic disease and a strong predictor of morbidity and mortality (CDC, 2018).

A post intervention focus group of about 10-15 randomly selected participants will gather qualitative data and program feedback.

Data is entered and analyzed in WebNEERS, the national data collection system for EFNEP. Impact reports are then generated to summarize program reach – here we have a sample 2020 NC impact report (USDA, 2020; NCEFNEP, 2020).

Slide 3:

EFNEP Evaluation: Strengths and Limitations



Strengths

- Validated assessment tools
- Existing data management system
- Pre-and Post-Intervention data
- Qualitative data included

Limitations

- Self-reported data
- Attendance must be closely monitored
- Lack of extended follow up

(USDA, 2020; USDA, 2013; CDC, 2018; Willett, 2012)

Slide 3 Narrative:

The strengths of this evaluation include existing valid assessment tools and data management system, pre and post intervention measures, and including qualitative data (USDA, 2020; USDA, 2013).

Limitations include self-reported data may lead to over or underreporting behaviors (Willett, 2012). Participants need to complete at least 6 one hour lessons to receive enough education so attendance must be watched closely. Currently there is a lack of long term follow up, this is why the quality of life measure is used which is a strong predictor of morbidity and mortality (CDC, 2018).

EFNEP aims to promote health equity by creating an opportunity for low income families to improve their health and nutrition.

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APPENDIX D – LEE DELIVERABLES

PROBLEM STATEMENT

Social Determinant of Health

Poverty has drastic impacts on health outcomes for many different populations. There are many ways to define poverty, but within the context of public health, poverty is a social determinant of health. According to The Centers for Disease Control and Prevention (CDC), poverty is defined as a condition in which a person or group of people lack human needs because they cannot afford them (Centers for Disease Control, 2020). Poverty is assessed and measured by the Federal Poverty Level (FPL), which is expressed as an annual pre-tax income level indexed by the size of the household and age of household members (United States Census Bureau, n.d.). It is a goal of the Healthy People 2030 objectives to reduce the proportion of people living below the poverty threshold from 11.8% in 2018 to 8% (Offices of Disease Prevention and Health Promotion, et. al., n.d.). By doing so will improve health outcomes for vulnerable populations, particularly on rates of obesity that can lead to chronic health conditions.

One aspect of poverty that impacts obesity and subsequent health outcome is unemployment. Job security, income, and employment-related benefits are some factors that are diminished by unemployment, which impacts people's ability to meet living expenses (Office of Disease Prevention and Health, 2020). There are both short- and long-term impacts that unemployment has on health outcomes. Short-term impacts are loss of health insurance, paid sick leave, and parental leave (Office of Disease Prevention and Health, 2020). Paid sick leave

and maternity leave have been shown to be associated with positive health outcomes, however those who are unemployed do not receive these benefits, which decreases their ability to access healthcare (Office of Disease Prevention and Health, 2020). These short-term impacts are coupled with depression, anxiety, low-self-esteem, and demoralization, which can transpire into long-term impacts (Office of Disease Prevention and Health, 2020). Long-term impacts on health due to unemployment are stress-related illnesses (high blood pressure, stroke, heart attack, etc.) and poor mental health (Office of Disease Prevention and Health, 2020). The long-term impact of focus is obesity, which is associated with diabetes, stroke, poorer mental health, and other chronic conditions (CDC, 2020).

Geographic and Historical Context

The geographic context of Cumberland County has shaped how the social determinant of unemployment impacts people's health outcomes. The population of the county is 325,841 people (Cumberland County, 2019). In 2018, the North Carolina Department of Commerce ranked the county as one of the most economically distressed counties in the state (DeVane, 2018). This ranking was determined based on average unemployment rate, median household income, percentage growth in population, and the adjusted property tax base per capita (DeVane, 2018). The State of the County Health Report cites specific demographics of those who live in poverty in Cumberland County. Of those who live in poverty, 18.2% are females, 29.8% are American Indian and Alaska Native families, and 23% are children growing up with adverse childhood experiences (Cumberland County Department of Public Health, 2020). Furthermore, 37.8% of the Cumberland County population who work live below the poverty level. These drastic statistics have led the county to take actions to promote greater economic and social well-being within the community, setting a Healthy People 2030 goal of decreasing the number of

people living in poverty from 17% to 10% (Cumberland County Department of Public Health, 2020).

Priority Population

The priority population of interest for the social determinant of unemployment is households who reside under the 200% Federal Poverty Level (FPL) in Cumberland County, North Carolina. Currently, those who live in poverty make up 17% of the county population (Cumberland County Department of Public Health, 2020). 34% of the Cumberland County population is obese, compared to the state average of 30% (Robert Wood Johnson Foundation, 2019). All races and ethnicities that make up this population will be included for assessment of impacts on obesity, though it should be noted that minority populations face higher rates of unemployment and associated negative health outcomes.

Measure of Problem Scope

The problem scope will use the social determinant of unemployment and how it impacts obesity as a negative health outcome. Measures of occurrence of unemployment will be unemployment rate, median household income, percentage growth in population, and the adjusted property tax base per capita, as reflected by the system used by the North Carolina Department of Commerce (DeVane, 2018). The median income is \$44,810 for Cumberland County, compared to North Carolina's median household income of \$48,256 (Cumberland County, 2019) (Appendix D.1). The unemployment rate for the county is 5.8%, compared to North Carolina at 4.6% (Robert Wood Johnson Foundation 2019). Because the priority population is households who live under the FPL, this will also be used as a measure of occurrence. The average household size in Cumberland County is 2.6 (Cumberland County, 2019). Using this average, the 2021 Federal Poverty Guideline for a household of 2 is \$17,420,

and for a household of 3 is \$21,960 (Office of the Assistant Secretary for Planning and Evaluation, 2021). A more detailed table of the poverty guidelines can be found in the Appendix D.2. Because obesity impacts those in poverty at a higher rate than those above the FPL, obesity rates will be an additional measure of occurrence. Extrapolating data from the North Carolina state level to fit to Cumberland County, 45% of those who live below the FPL are overweight or obese, compared to 39.8% at the national level (Obesity Action Network, 2007).

Rationale and Importance

Unemployment as a social determinant of health is important for this priority population because it directly impacts poverty. A high poverty rate is both a cause and consequence of poor economic conditions, which can lead to negative health outcomes for all populations (Cumberland County, 2019). Physical health problems such as the obesity, behavioral problems, emotional problems, social isolation, and inability to afford necessary expenses are both outcomes and factors that exacerbate health disparities (Cumberland County, 2019). Employment can lift vulnerable populations out of poverty and provide means, such as a livable income and employment benefits, to improve obesity rates and associated health outcomes for those who live below the Federal Poverty Level (Cumberland County, 2019).

Disciplinary Critique

Health policy professionals must address the impacts of poverty due to unemployment because of the direct link to health disparities that ultimately lead to health inequities. Being in poor health is associated with increased risk of job loss, and job loss and unemployment are associated with poorer health outcomes (Antonisse and Garfield, 2018). The cyclical links between unemployment and negative health outcomes indicates a need for policies to address why populations experience higher unemployment rates and what solutions can be created to

close to these gaps. By implementing and enforcing evidence-based policies to improve unemployment rates in Cumberland County, vulnerable populations can be lifted out of poverty, which can lead to improved obesity rates and overall better health outcomes.

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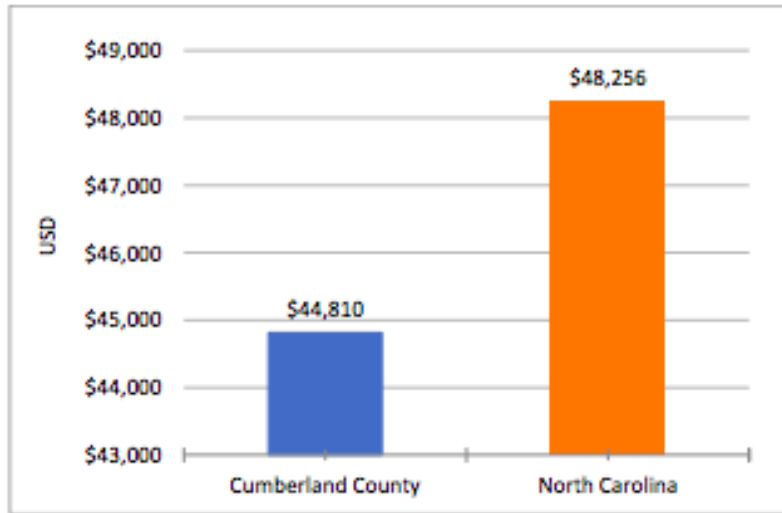
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APPENDIX D.1

Figure D.1. Median Income Level for Cumberland County and North Carolina.

Figure 14. Median Household Income (American Community Survey, 2012-2016)



APPENDIX D.2

Figure D.2. 2021 Poverty Guidelines for the 48 Contiguous States and the District of Columbia. (The Office of Assistant Secretary for Planning and Evaluation 2021).

U.S. FEDERAL POVERTY GUIDELINES USED TO DETERMINE FINANCIAL ELIGIBILITY FOR CERTAIN FEDERAL PROGRAMS

HHS POVERTY GUIDELINES FOR 2021

The 2021 poverty guidelines are in effect as of January 13, 2021

The Federal Register notice for the 2021 Poverty Guidelines will be published on February 1, 2021.

2021 POVERTY GUIDELINES FOR THE 48 CONTIGUOUS STATES AND THE DISTRICT OF COLUMBIA	
PERSONS IN FAMILY/HOUSEHOLD	POVERTY GUIDELINE
For families/households with more than 8 persons, add \$4,540 for each additional person.	
1	\$12,880
2	\$17,420
3	\$21,960
4	\$26,500
5	\$31,040
6	\$35,580
7	\$40,120
8	\$44,660

TRANSFORMATION PLAN: POLICY ANALYSIS

Background Information

Poverty is a major social determinant that increases risk of chronic diseases and negative health outcomes (Office of Disease Prevention and Health, 2020). Unemployment, a component of economic stability, directly impacts poverty. Job security, income, and employment-sponsored insurance are some of the many benefits that are lost through unemployment, which impacts people's ability to meet living expenses. Loss of health insurance, paid sick leave, and parental leave, increased risk of stress-related illnesses (high blood pressure, stroke, heart attack, etc.), and poor mental health, are all consequences of unemployment (Office of Disease Prevention and Health, 2020). For the priority population of interest in Cumberland County, which is households who reside under the Federal Poverty Level (FPL), policies that target unemployment are necessary to lift vulnerable populations out of poverty and provide means, such as a livable income and employment benefits, to improve health outcomes and health equity.

Policy Options

The two policy options that have been identified to address chronic diseases caused by the social determinant of unemployment are Medicaid expansion and strengthened unemployment insurance in the state of North Carolina. The Medicaid program is a joint federal-state program that provides health insurance to those with low incomes (Medicaid, n.d.). Medicaid expansion in North Carolina would extend Medicaid coverage to the priority population in Cumberland County. Strengthened unemployment insurance is also a joint federal-state social insurance program (North Carolina Budget and Tax Center, 2021). This program

provides temporary cash payments to alleviate economic hardships for people who experience job loss. Specific parameters of the strengthened unemployment program will be as follows:

- 1) Eliminate multiple waiting weeks for unemployment benefits.
- 2) Change the duration of benefits from a sliding scale to a fixed 26 weeks.
- 3) Allow people who leave employment for spousal relocation, health reasons, domestic violence, or family hardship, to claim unemployment insurance.

The four components of the policy evaluation criteria are *cost to the government, impact, political feasibility, and equity*.

Policy Analysis

The Medicaid program covers over 72.5 million Americans, making it the single largest source of health coverage in the country (Medicaid, n.d.). Medicaid provides health insurance to those with incomes below 138% of the federal poverty line, which is about \$17,600 for a single adult (Cross-call and Broaddus, 2020). However, not every state has expanded Medicaid coverage, including North Carolina. In the state, there are currently 720,000 uninsured adults who would be eligible for Medicaid if the state expands the program (Center on Budget and Policy Priorities, n.d.). Studies show that amongst older adults gaining coverage through Medicaid expansion, there is an estimated 39-64% reduction in annual mortality rates (Cross-call and Broaddus, 2020). Medicaid expansion has saved the lives of at least 192,000 people over a 4-year period from 2014-2017 (Cross-call and Broaddus, 2020). Aside from improved health outcomes, Medicaid is also a powerful anti-poverty tool. For those who gained healthcare coverage from Medicaid, there was a \$1,140 reduction in medical bills per low-income adult (Center on Budget and Policy Priorities, 2020). There was also a reduction in evictions amongst low-income renters (Center on Budget and Policy Priorities, 2020). Additionally, there was an

annual interest savings amounting to \$280 per adult who gained coverage because Medicaid expansion allowed these people to gain better access to credit, lower-interest mortgages, auto, and other loans (Center on Budget and Policy Priorities, 2020).

Unemployment insurance provides critical support for involuntarily unemployed people and their families by replacing a share of lost wages while workers search for a new job. Studies show that strengthening the unemployment insurance program is associated with an increased likelihood of having or maintaining health insurance, is tied to increases in Medicaid enrollment, and increases the likelihood that unemployed workers take advantage of preventive health services, routine checkups, and exams. Strengthened unemployment insurance also substantially decreases poverty rates amongst the unemployed (North Carolina Budget and Tax Center, 2021). This evidence coincides with studies that indicate that more adequate wage replacement from unemployment insurance, as well as a longer duration of unemployment insurance, improves health and overall well-being (North Carolina Budget and Tax Center, 2021). The unemployment insurance program provides people with the support to stay connected to job searches and build useful work skills, while also counteracting the negative feelings and health outcomes associated with job loss and long-term unemployment (North Carolina Budget and Tax Center, 2021). Strengthening the unemployment insurance program will ultimately lead to a reduced risk of chronic health conditions and better health outcomes.

Below is a table comparing the policies of Medicaid expansion and strengthened unemployment insurance to the evaluation criteria, based on a 5-star ranking scale. 1 star is low impact and 5 star is high impact.

Table D.1 Policy Analysis Evaluation

	Medicaid Expansion	Unemployment Insurance
<i>Cost to the Government</i>	****	**
<i>Impact on Target Population</i>	**	****
<i>Political Feasibility (see below explanation for relevant stakeholders)</i>	**	***
<i>Equity</i>	**	****
Total Stars	10	13

In terms of political feasibility, stakeholders who will likely support Medicaid expansion and unemployment insurance are Democratic political leaders and the population with low-incomes who could attain benefits of both policies. Stakeholders who support Medicaid expansion cite studies that show that Medicaid expands coverage options and increases access to care for low-income populations (American Medical Association, n.d.). Stakeholders who support strengthened unemployment insurance reference evidence that shows such programs increase positive health outcomes and improves both economic and health equity for low-income populations (West, et. al, 2016).

Stakeholders who may oppose Medicaid expansion and unemployment insurance are Republican political leaders and interest groups, such as business associations who tend to support right politics. Stakeholders who oppose Medicaid expansion reference that expansion will burden taxpayers with billions in new health costs, much of which the states will have to shoulder on their own (Pipes, 2015). Historically, Republican lawmakers have not supported state Medicaid expansion (Pipes, 2015). Stakeholders who oppose unemployment insurance point out that this program will add to the already-high deficit (Caldwell, 2014). Business

associations who tend to support right politics also believe that more unemployment benefits offer an incentive to remain unemployed (Caldwell, 2014).

Final Recommendation

Given the current evidence of Medicaid expansion and strengthened unemployment insurance, both have the potential to improve health outcomes by decreasing the risk of chronic conditions for people living under the federal poverty line in Cumberland County. **The final recommendation is choosing strengthened unemployment insurance for the state of North Carolina.** This was chosen because this policy option better aligned with the evaluation criteria of cost to the government, impact, political feasibility, and equity. Medicaid expansion scored 10 stars, compared to strengthened unemployment insurance with 13 stars. Unemployment insurance is both an anti-poverty tool and a vehicle for improved health outcomes because it addresses the social determinant of economic stability through improving unemployment assistance in the county. There is an abundance of detailed, credible, and tangible evidence to support how strengthened unemployment insurance in North Carolina can lift those living in poverty to improve health outcomes. With the involvement of all relevant stakeholders, unemployment insurance can improve the lives of the low-income population, further progressing health equity in the county.

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PROGRAM BUDGET

Summary

Poverty is a major social determinant that impacts chronic conditions and subsequent health outcomes. Unemployment, a component of economic stability, directly impacts poverty. Loss of health insurance, paid sick leave, and parental leave, as well as increased risk of stress-related illnesses (high blood pressure, stroke, heart attack, etc.) and poor mental health are all consequences of unemployment. For the priority population of interest in Cumberland County, which is households who reside under the 200% Federal Poverty Level (FPL), policies that target unemployment are necessary to lift vulnerable populations out of poverty and provide means, such as a livable income and employment benefits, to improve health outcomes and health equity. To address unemployment impacts on poverty for those living under the Federal Poverty Line (FPL) in Cumberland County, the policy of strengthening the unemployment insurance program was selected. By using unemployment insurance as an anti-poverty tool, this policy will improve the health outcomes for those living in poverty in the county.

Strengthened unemployment insurance (UI) is a joint federal-state social insurance program. This program provides temporary cash payments to alleviate economic hardships for people who experience job loss. Specific parameters of the strengthened unemployment program will be as follows:

- 1) Eliminate multiple waiting weeks for unemployment benefits.
- 2) Change the duration of benefits from a sliding scale to a fixed 26 weeks.
- 3) Allow people who leave employment for spousal relocation, health reasons, domestic violence, or family hardship, to claim unemployment insurance.

See Appendix D.3 for budget breakdown.

Budget Narrative for Strengthened Unemployment Insurance

Category and Explanation	Amount
1. STAFF COSTS	
Full-Time Director of the Unemployment Insurance Program: <i>The Director of the Unemployment Insurance Program oversees the UI staff and projects. They will maintain connections with community partners, outside stakeholders, and internal staff. The Director will be the public-facing leader for the ACC for UI. The Director will be in charge of the budget and grant funding. They will also be the liaison to policymakers and legislative officials. They should have prior experiences in public health leadership, insurance programs, and policy experience, and be committed to public health stewardship.</i>	\$75,000
Full-Time UI Project Manager: <i>The UI Project Manager will assist the Director and oversee all UI-related projects for the ACC. The project manager will be an experienced public health leader with experience in using project management tools. The project manager will address any challenges on UI-related projects and maintain overall staff efficiency of the UI projects.</i>	\$52,000
Analysts (3): <i>Analysts will support ongoing projects for UI. Data collection, policy analysis, qualitative and quantitative research, project implementation, and project evaluation are some of the many tasks analysts will support. Analysts should have experience in public health and be well-versed in data analysis. They will produce deliverables for both the UI Project Manager and UI Director.</i>	\$45,000 each, \$135,000 total
Community Outreach Leads (2): <i>Community Outreach Leads will be working directly with the impacted population to assist in navigating the unemployment insurance system, confirming eligibilities, and assisting in access to necessary services. They will serve as the liaison between the UI projects and the community. They should have experience conducting community outreach and will be dedicated to maintaining and deepening community relationships, fostering trust, and providing clear communication for the community.</i>	\$45,000 each, \$90,000 total
Total Staff Costs	\$352,000
2. FRINGE BENEFITS (including taxes and health insurance)	
Full-Time Director of the Unemployment Insurance Program - 30% of base salary	\$22,500
Full-Time Unemployment Insurance Project Manager - 30% of base salary	\$15,600
Analysts (3 Full-Time) - 30% of base salary each	\$13,500 each, \$40,500 total
Community Outreach Leads (2 Full-Time) - 30% of base salary each	\$13,500 each, \$27,000 total
Total Fringe Benefits	\$105,600
3. PROGRAM COSTS	
Professional Services: <i>Training programs, speakers, and other events relating to projects will be used as professional services for all staff members. Such items include diversity and inclusion trainings, cultural competency trainings, and internal biases trainings. These services will provide professional development for all staff workers so they can improve their skills to better serve the community.</i>	\$1,000

Technology: <i>Necessary software and technology support will be provided for each staff member, such as broadband access. Platforms such as Zoom and Skype will be utilized for internal and external communication. Data analysis software and project management tools will be covered under this cost.</i>	\$5,000
Equipment: <i>Each staff member will be provided with a laptop or desktop computer for their work. Accompanying equipment to accommodate staff needs will be provided as well to suit each remote working situation. This also covers costs associated with any technology help, which will be sourced to an outside entity.</i>	\$8,500
Total Program Costs	\$14,500

Budget Justification

The ACC is allocated \$500,000 a year in grant funding to implement, evaluate, and sustain the unemployment insurance program in Cumberland County. All staff will be working remotely from their comfort of their own home, which means there are no overhead costs or rent to be paid for a brick and mortar building. Technological equipment and broadband technology will be provided for each staff member so they can access all ACC resources and services remotely. If a staff member needs any information technology help, the company the laptop were purchased from will be called in for assistance. This means no official IT specialist is required for the ACC. Additionally, the unemployment insurance program is already a standing system, meaning much of the infrastructure is already operating, which cuts much of the cost.

Staff Costs: One Director for the Unemployment Insurance Program, one UI project manager, three analysts, and two community outreach leads were selected based on the county size. Income levels are based on prior public health and policy experience. All staff members are full-time employees who will receive benefits (see below).

Fringe Benefits: Fringe benefits are based on a percent of direct labor dollars. For all staff members, the rate is 30%. Costs for the health insurance premium are also included for UI project employees.

Program Costs: All program costs reflect the remote working environment. Broadband access, technology equipment, and professional services will support the work and growth of staff members. Employees are not required to travel, so no food or travel expenses will be incurred. The current unemployment insurance system will be utilized by the staff.

APPENDIX D.3. Budget for Strengthened Unemployment Insurance

		Year 1		
		Salary	Fringe	Total Cost
Staff Costs	Full-Time			
	Director of the Unemployment Insurance Program	\$75,000	\$22,500.00	\$97,500.00
	1 Unemployment Insurance Project Manager	\$52,000	\$15,600.00	\$67,600.00
	3 Analysts	\$135,000	\$40,500.00	\$175,500.00
	2 Community Outreach Leads	\$90,000	\$27,000.00	\$117,000.00
Total				\$457,600.00
Other Program Costs	Professional Services			\$1,000
	Technology			\$5,000
	Equipment			\$8,500.00
Total				\$14,500.00
Total Program Cost				\$472,100.00
Income/Revenue	ACC Grant			\$500,000

	Year 2			Year 3		
	Salary	Fringe	Total Cost	Salary	Fringe	Total Cost
Staff Costs						
	\$ 76,500.00	\$ 22,950.00	\$ 99,450.00	\$ 78,030.00	\$ 23,409.00	\$ 101,439.00
	\$ 53,040.00	\$ 15,912.00	\$ 68,952.00	\$ 54,100.80	\$ 16,230.24	\$ 70,331.04
	\$ 137,700.00	\$ 41,310.00	\$ 179,010.00	\$ 140,454.00	\$ 42,136.20	\$ 182,590.20
	\$ 91,800.00	\$ 27,540.00	\$ 119,340.00	\$ 93,636.00	\$ 28,090.80	\$ 121,726.80
Total			\$ 466,752.00			\$ 476,087.04
Other Program Costs			\$1,000			\$1,000
			\$5,000			\$5,000
			\$ 8,500.00			\$ 8,500.00
Total			\$ 14,500.00			\$ 14,500.00
Total Program Cost			\$ 481,252.00			\$ 490,587.04
Income/Revenue			\$500,000			\$500,000

SAY YES TO STRENGTHENED UNEMPLOYMENT INSURANCE

North Carolina's current unemployment insurance program does not provide critical assistance to laid off workers and their families. In fact, the state ranks the worst in the nation. Currently, North Carolina ranks the **51st lowest state** for receiving unemployment benefits, providing barely \$200 a week to jobless workers to survive.¹ **North Carolina provides too little in wage replacement to too few jobless workers for too short of a duration.** House Bill 101 will change that by:

- Increasing maximum duration for receiving benefits to 26 weeks
- Increasing maximum benefit amount
- Adopting Work-Sharing/Short-Time Compensation option
- Restoring spousal relocation, family hardship, and health reasons as causes for leaving employment.²

Insurance recognizes the central role workers play in the well-being of the economy.

- Worker well-being determines the strength of economic recovery, and unemployment insurance can improve economic downturns and recessions.³

Unemployment insurance substantially decreases poverty rates amongst the unemployed.

- Studies indicate that more adequate wage replacement from unemployment insurance improves overall health and well-being.⁶

Strengthened unemployment insurance improves health outcomes.

- Studies show an increased likelihood of having or maintaining health insurance and higher Medicaid enrollment.⁵
- There is increased likelihood that unemployed workers take advantage of preventive health services, routine check-ups, and exams.⁵

North Carolina must support strengthening the unemployment insurance program by saying YES to House Bill 101.



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APPENDIX D.5.

Policy Pitch

Thank you to the representative members of the committee for allowing me to speak today. My name is Grace Lee and I am here representing the NC Center for Justice.

I am here to talk to you about saying yes to House Bill 101 and supporting a strengthened unemployment insurance program. North Carolina's current unemployment insurance program does not provide critical assistance to laid off workers and their families. In fact, the state ranks the worst in the nation. Currently, North Carolina ranks the 51st lowest state for receiving unemployment benefits, providing barely \$200 a week to jobless workers to survive.

Unemployment insurance is an anti-poverty tool which can be leveraged to lift populations, especially vulnerable populations, out of poverty to improve health equity. This legislative solution is supported by these reasons.

The first is that studies have shown that strengthened unemployment insurance improves health outcomes. Studies show an increased likelihood of having or maintaining health insurance and higher Medicaid enrollment. There is also increased likelihood that unemployed workers take advantage of preventive health services, routine check-ups, and exams. The second reason is that unemployment insurance provides people with support, connections to job searches, and opportunities to build work skills. It also counteracts negative feelings associated with job loss and long-term unemployment, which is crucial for maintaining mental health. Finally, unemployment insurance substantially decreases poverty rates amongst the unemployed populations. Studies show that a more adequate wage replacement and longer duration from unemployment insurance programs improves overall health and well-being. This improvement in livelihood can lead to improved poverty rates.

The estimated costs of this policy include increasing duration and amount of benefits from the state and federal government. We need a solution to fortifying the unemployment insurance program in North Carolina. Please join me in saying yes to House Bill 101 as a solution to improve health outcomes. Thank you for your time. At the end of this presentation, I welcome any questions anyone on the committee may have.

APPENDIX E – REARDON DELIVERABLES

PROBLEM STATEMENT

Social Determinant of Health: Poverty

Approximately 38 million people, or 1 in 10 Americans, currently live in poverty (Semega et al., 2020). Federal, state, and local governments spend upward of \$1 trillion annually on anti-poverty programs, but 1 in 5 children continue to live in families existing below the federal poverty threshold (Haskins, 2017).

The Healthy People 2030 Objectives established by the U.S. Department of Health and Human Services has established a goal of reducing the proportion of Americans living in poverty from 11.8% (in 2018) to 8% over the next decade (U.S. Department of Health and Human Services, n.d). These objectives specifically define a goal of helping people “earn steady incomes that allow them to meet their health needs.”

The effects of poverty on individuals and families are far reaching, and there is strong evidence for the relation between poverty and chronic health conditions (Oates et al., 2017). Income level disparities specifically, as compared to education level, are more closely linked to chronic diseases such as obesity, diabetes, and heart disease (Oates et al., 2017). Children from low-income families are more likely to have health conditions such as asthma, obesity, and poor mental health, and childhood poverty is linked to physical disability, clinical depression, and premature death in adulthood (Paul-Sen Gupta et al., 2007). Racial and ethnic minorities are more likely than White Americans to live in poverty and poor Americans are more likely to

engage in risky health behaviors such as drinking, smoking, or eating unhealthy foods (NCIOM Task Force on Prevention, 2009). These illnesses and behaviors affect performance and well-being, lead to chronic illness, and perpetuate racial inequities in communities.

The US Census Bureau is responsible for assessing poverty, which is measured by comparing a person's or family's income to a set minimum amount of income needed to cover basic needs (Institute for Research on Poverty, 2020). However, research suggests that families typically need an income about two times the federal poverty threshold to actually meet those needs (Koball and Jiang, 2018). Economic insecurity forces families to choose between necessities such as food, medications, and health care, thus perpetuating health problems and inequities (Institute for Research on Poverty, 2020). Living under such circumstances creates chronic stress that contributes to a reinforcing cycle of chronic illness and disease.

Geographic and historical context: Cumberland County, NC

The Cumberland County Department of Public Health was formed in the early 1900s with two paid staff, and since has expanded to 220 employees across multiple disciplines. The most recent Community Health Needs Assessment completed in Cumberland county paints a picture of a diverse population. Approximately one of every 10 households' reports speaking a language at home other than English (United States Census Bureau, n.d.). About one of every 3 survey respondents are connected to current or former military status, and over half of residents are affiliated with Ft. Bragg or Pope Army Airfield, the Army installations located in Fayetteville, NC (Cumberland County Department of Public Health, 2016).

With respect to poverty and health outcomes, Cumberland County faces some significant challenges. Despite the presence of a stable military workforce, one of every 5 residents of Cumberland County live at 100% below the federal poverty level (North Carolina Institute of

Medicine, n.d.). Living below the poverty level in Cumberland County is more common for African American, Alaska Native, and American Indian families, as well as teens and young adults in general, lending some evidence for the influence of structural racism in sustaining poverty in communities (Cumberland County Department of Public Health, 2019).

Priority Population. The majority of residents living in poverty in Cumberland County are females, 18-34 years of age, that either do not work or work part time or part of the year (Cumberland County Poverty Statistics, n.d.). As already noted, those living in poverty are more likely to be residents of color. Recent data reflects the unemployment rate for women and people of color is rising more quickly than for other populations. Focusing interventions on minority women of color of working and childbearing age in Cumberland County would have multiple benefits. First, supporting this population toward economic stability will help reduce the impact of short- and long-term health conditions for these women, improving their functioning and productivity. Second, there will be indirect benefits to children born into these households. If their mothers are provided appropriate programs to reduce inequities and decrease health problems, they will be better equipped to provide food, healthcare, and emotional support to their children, improving their wellness and chances of success (Cumberland County Poverty Statistics, n.d.).

Measures of problem scope. As compared to the rest of North Carolina, Cumberland County ranks higher on report of poor health, obesity, unemployment, children living in poverty, and children living in single parent homes (University of Wisconsin Population Health Institute, 2021). The residents of Cumberland County struggle significantly with chronic health issues. One in 3 adult residents is obese (North Carolina Institute of Medicine, n.d.), and rates of heart disease, cancer, chronic kidney disease, and rheumatoid arthritis are higher there than in other

parts of the state. All of these health conditions are costly, and obesity is a consistent risk factor for all of these problems (Cumberland County Department of Public Health, 2016).

Cumberland County residents are cognizant of the challenges to their health and quality of life. Information gathered from recent focus groups and community health assessments reflect residents would like more information about eating well and nutrition. In addition, a quarter of participants noted low income and poverty to be a significant quality of life issue, and higher paying employment as a service needing the most improvement (Cumberland County Department of Public Health, 2019). The large majority of residents responding to the assessment are employed (94%); however, importantly, employment pay and benefits must be sufficient to meet basic needs in order to be worthwhile and sustainable.

Rationale/Importance. The North Carolina Healthy People 2030 Objectives include a Cumberland County-specific objective to reduce poverty level from 17% to 10% (Cumberland County Department of Public Health, 2019). Steady employment has more than economic benefits. Employment can also create a needed family structure, enhance personal identity and purpose, and provide opportunity for socialization (Haskins, 2017). Alternatively, previous research has identified associations between unemployment and family destabilization, suicide, substance misuse, shortened lifespan, and overall poor psychological well-being (Haskins, 2017).

Disciplinary critique. Medical experts in North Carolina emphasize that until racial and ethnic disparities are successfully addressed, the overall state population health is not likely to improve (North Carolina Institute of Medicine, 2009). The significant minority of Americans that continue to grow up and stay poor is an ongoing public health concern. Poverty is linked to innumerable negative socioeconomic, physical, and mental health outcomes. Government

programs and policies are not yet adequately equipped to create sustainable change for these communities.

Public health experts need to actively use their knowledge, networking and lobbying skills, and educational and social media resources. They need to regularly and consistently publicize the importance of social health equity for community health and wellness, reducing costs, and improving overall population quality of life. The impoverished residents of Cumberland County have little opportunity for advancement and sustained improvement without the voice of individuals that are positioned to incite change.

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APPENDIX E.1

Table E.1. Racial/ethnic distribution, Cumberland County v. NC (2019)

	Cumberland County	North Carolina
White	52%	70.6%
Hispanic	12%	10%
African American	39%	22%
Asian	3%	3%
Native Hawaiian/Pacific Islander	0.4%	0.1%
American Indian	2%	2%
2 or more races	5%	2%
White, not Hispanic	43%	63%

SYSTEM, STAKEHOLDER, AND TRANSFORMATION ANALYSIS

Social determinant of health and policy transformation in Cumberland County. The North Carolina Healthy People 2030 Objectives include a Cumberland County-specific objective to reduce poverty level from 17% to 10% (Cumberland County Dept of Public Health, 2019,). As compared to the rest of North Carolina, Cumberland County ranks higher on report of poor health, obesity, unemployment, children living in poverty, and children living in single parent homes (County Health Rankings and Roadmaps – North Carolina, 2021). The majority of residents living in poverty in Cumberland County are females, 18-34 years of age, that either do not work or work part time or part of the year (Cumberland County Poverty Statistics, n.d.). Those living in poverty are more likely to be residents of color, and recent data reflects the unemployment rate for women and people of color is rising more quickly than for other populations (Cumberland County Poverty Statistics, n.d.). In a recent community health needs assessment, Cumberland County residents reported low income and poverty to be a significant quality of life issue, and higher paying employment as a service needing the most improvement (Cumberland County Department of Public Health, 2019).

Steady employment has more than economic benefits. Employment can also create a needed family structure, enhance personal identity and purpose, and provide opportunity for socialization (Haskins, 2017). Alternatively, previous research has identified associations between unemployment and family destabilization, suicide, substance misuse, shortened lifespan, and overall poor psychological well-being (Haskins, 2017).

The North Carolina Office of State Human Resources has implemented a Workforce Planning Policy that proactively ensures the development and maintenance of a workforce

capable of delivering quality services. It involves analyzing current workforce dynamics, determining future workforce needs, identifying gaps, and implementing solutions to enable an organization to meet its mission and objectives (NC Office of State Human Resources, n.d.). It also includes initiatives focused on identifying key positions, positions that are hardest hit by attrition, and those positions that are most difficult to fill.

Research suggests that programs that provide education, training, and support services help create sustained employability. (Mitchell, 2018). Our recommendation would be to expand the Workforce Planning Policy to create a program partnering with local businesses in the county (i.e., Cape Fear Valley Health System, Goodyear Tire, Walmart, Fayetteville Technical Community College). The partnership would include completing needs assessments at these organizations and developing comprehensive education, training, and support programs that would sustainably fill employment gaps in the county. Programs would be focused on unemployed and underemployed Cumberland County residents living in poverty to create sustainable jobs emerging from the program.

Stakeholder analysis: Rationale and recommendations. A stakeholder analysis grid was completed to organize and evaluate data associated with stakeholders relevant to our workforce planning policy. The analysis grid was chosen as a tool to help assess to what extent stakeholders would be likely to support the policy; what power they might have in driving the policy; and what resources they might offer to the process. I also referenced the stakeholder influence grid to assess the relation between power and interest and where to focus attention and resources.

NC Office of State Human Resources should drive policies and procedures. This office has the resources, tools, and staff to lead the way in driving policy advancements in

Cumberland County. They are a powerful stakeholder that can engage other powerful stakeholder groups, both formal (i.e., local Dept of Health, local businesses) and informal (i.e., local church and community leaders). The engagement should include creating a diverse group of stakeholders for the purpose of representing the voices of all interest groups. Importantly, the intended recipient of policy change – unemployed and underemployed residents of Cumberland County – have relatively weak power as stakeholders as compared to the larger organizations involved. This only reinforces the need to include them throughout the process, empowering them with understanding and education so that they can ask relevant questions and provide input. Their voice and perspective need to be heard regularly so as to never lose sight of what changes look like from their eyes. Indeed, if more powerful stakeholders are not on board with change, they may attempt to scare other stakeholders with fear of potential impact of change. Because people naturally fear the unknown, they may then oppose change, even if the potential changes would be an improvement over their existing situation.

Informal leaders and community members are likely a powerful stakeholder.

Informal leaders in the community – church leaders, youth center leaders – may likely be vital to the success of this policy change. They should be invited into the planning process early on and educated about the policy – the analysis tools, how they will be used with businesses, and then how this will ultimately help citizens. Because they are respected within the local communities, they can help instill trust in other stakeholder groups and the process in general.

It would be important to identify local businesses already involved with the NC State Office of HR Workforce Planning policies, as they are a powerful stakeholder. Local businesses already engaged with these policies are proof of success. They can help explain the processes, emphasize how and why the policy is successful, and how it can benefit the business

and the community as a whole. Personalized “success stories,” though anecdotal, can be powerful in stirring interest, motivation, and trust.

Local and state level public health department, local and state level stakeholders, and informal local leaders will all be vital to the success of this program expansion and policy transformation. Establishing rapport and trust with the local communities will take time and the involvement of stakeholders at all levels of policy to be successful. The NC State Office should take it upon itself to identify vital stakeholders and engage them from the beginning. Iterative learning and changes will necessarily be part of the process.

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APPENDIX E.2

Table E.2. Stakeholder Analysis Grid

Stakeholder	Support or opposition to policy	Reasons for support or opposition	Extent of power	Resources stakeholder brings to the issue	Likelihood of getting involved in the issue	Ways to influence stakeholder's position
1. NC Office of State Human Resources	Strong support	Already engaged with the work; motivated to improve sustainability of NC work force	Very powerful	Money, staff, analysis tools already being used	very	Probably not needed – unless they have a sense this expansion would tax/stress current resources and take away from current initiatives
2. Cumberland County Department of Health	Strong support	Motivated to improve health and quality of life of CC residents; motivated to address issues reported in the CHNA	Very powerful	Money, state influence, health experts	Somewhat	Should be supportive and understand the relation between health and sustainable employment
3. Local businesses in the county (i.e., Cape Fear Valley Health System, Goodyear Tire, Walmart, Fayetteville Technical Community College	Moderate support	May have concerns about affordability and stress on current resources	Very powerful	Job opportunities, training opportunities. Bring steady money into the county	Very, whether interested or opposed	Emphasize the ability to help predict outcomes and improve sustainability and stability of workforce in each business
4. NC Dept of Education	Moderate support	Single parents' involvement in work/training opportunities may increase need for before- and after-school programming for their children	Somewhat powerful	Resources and programs to help working parents; relationships with school programs and childcare programs	Somewhat, depending on availability of resources	Emphasize long-term outcomes on improving wellness for children if parents are working sustainably
5. under-employed CC residents	Moderate to neutral support	May be skeptical that programs will actually increase their salaries; may feel secure in current positions despite living in poverty	Somewhat weak	Motivation, skills, community connections, drive for better quality of life	Somewhat to very, depending on understanding of programs and policies and belief their quality of life can be improved	Education on opportunities, what to expect, timelines. Make the process concrete and believable
6. unemployed CC residents	Moderate to neutral support	Most insurance benefits cover basic wellness, though they still make money	Somewhat weak	Motivation, skills, community connections, drive for better quality of life	Somewhat to very, depending on understanding of programs and policies and belief their quality of life can be improved	Education on opportunities, what to expect, timelines. Make the process concrete and believable
7. Informal leaders, agencies: religious centers, community centers	Moderate support	Help improve quality of life for community members and their families	Somewhat powerful	Typically have close relationships with community members. Can help increase trust in the process	Somewhat to very, depending on understanding of programs and policies and belief the policy can improve the community in a sustainable way	Education on opportunities, what to expect, timelines. Make the process concrete and believable

Which are the most powerful groups that need to be monitored and engaged? Both the NC Office of State HR and local businesses need to stay engaged. The NC Office is the central agency that will be providing resources, staff, and tools (i.e., analysis tool), and should be the driver in the policy, taking action to engage PDSA cycle and make changes as needed. They will need to focus on local businesses and keep those businesses engaged in the process, to ensure the job opportunities expected as part of the policy will come to fruition.

Which are the other groups that need to be satisfied? The un- and under employed need to be satisfied. They need to be kept abreast on the policy, what options they have, and how these opportunities may benefit them. It may take time to develop trust in these relationships, as up to this point, residents have not necessarily been engaged with these agencies and businesses in such a direct manner.

What are the other groups to keep informed? The local health departments and local departments of education must be kept informed on progress and any conflicts or challenges that are arising with respect to meeting needs in the community. As needed, the NC Office of State HR may call upon them to provide resource support.

What problems do you anticipate, if any? There may be issues with resource management. What are the limitations of staff, analysis tools, time, within the NC Office of State Human Resources to complete needs assessments with local businesses? Also, we would need to be mindful that local residents may be overwhelmed, mistrustful, or otherwise uncertain about opportunities presented to them. It will be important to take time to establish trust and rapport,

continue to do formal and informal needs assessments, and make iterative changes to policies and procedures accordingly.

ENGAGEMENT PLAN

Statement of Purpose: The North Carolina Healthy People 2030 Objectives include a Cumberland County-specific objective to reduce poverty level from 17% to 10% (Cumberland County Dept of Public Health, 2019). The goal of our Accountable Care Community (ACC) is to improve the overall well-being and prosperity of residents of Cumberland County by decreasing poverty through an employment-based initiative.

The North Carolina Office of State Human Resources (NCOSHR) encourages all agencies to engage in workforce planning and provides services and tools to develop and implement ongoing Workforce Planning Programs (NC Office of State Human Resources, 2007). We plan to increase employment opportunities for Cumberland County residents by using the Workforce Planning Programs tools and actively partnering with additional employers to increase training and job opportunities for under- and unemployed residents of Cumberland County.

The Cumberland County Department of Health (CC DoH), as the owner of this initiative, and the NCOSHR will partner as identified leaders of the engagement plan. An MOU between these agencies is attached.

Engagement Plan Purpose and Rationale: The purpose of our engagement plan is multifold. First, we aim to establish trust with our stakeholders through active and clear communication. Second, we will use the engagement plan to make decisions and keep track of decisions made during the program development and implementation. Third, the engagement plan can be used as a blueprint when looking to assign tasks during the project. Finally, this plan

will be used to keep stakeholders informed of the various activities surrounding our program implementation.

An initial meeting between representatives of the NCOSHR and the CC DoH will be scheduled. The purpose of this meeting will be twofold: 1) to educate the CC DoH on the current Workforce Planning Program resources to include identifying the local businesses already using these methods and 2) to finalize a list of stakeholders to initially engage. This meeting is necessary for the CC DoH to be fully informed on how the workforce analysis works and help identify include relevant stakeholders for expansion of the program. The NCOSHR and the CC DoH will work together to reach out to stakeholders for the engagement opportunities that follow.

Engagement Methods:

Focus groups: Initially, the CC DoH and NCOSHR will organize focus groups to include a representative from both of their agencies, several agencies/businesses already using the workforce analysis methods, residents that have been hired by these agencies since their use of the methods, and several residents not involved with these agencies, to include both employed and under- or unemployed representatives from the county. The NCOSHR member should explain how the current program works and the focus group should consider the following questions:

1. What is going well or not going well with the program currently? What are the major successes and challenges?
2. What are the best ways to promote these programs with agencies and businesses not currently using the analyses?

3. What are the best ways to engage residents who seek employment to consider engaging with this programming? What challenges might arise?
4. What other stakeholders need to be involved...who have we missed?

Engaging local agencies and businesses (i.e., Walmart, Cape Fear Valley Health System, Goodyear Tire, and Fayetteville Technical Community College, all of whom employ 1000+ Cumberland County residents; Cumberland County Community Health Assessment, 2016): Potential business partners to include in the program expansion will be invited to an open forum, to hear about the initiative and provide feedback. The Give-Get grid will be used to help potential partners recognize how this initiative can benefit them, and how they can contribute. Ideally, this initiative will not just increase employment of Cumberland County residents; the workforce planning tools offered by the NCOSHR are designed to analyze an agency's current and future workforce needs, with the goal of improving sustainability of the workforce. This could certainly be an asset to a business or agency that may struggle with turnover or finding the right employees for their positions. See Appendix for an example of a Give-Get grid that may be the potential outcome of this meeting.

Engagement Plan Matrix: Once we have reviewed feedback from focus groups and agencies have expressed their interest in this program initiative, The CC DoH and NCOSR will create an engagement plan matrix. This matrix will serve as an important tool in the engagement process. It keeps the leaders organized and ensures stakeholders are engaged to the appropriate extent at the right time in the process. See Appendix A for an example of our engagement plan matrix.

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APPENDIX E.3

Table E.3. Give-Get Grid: understanding business and health department/state agency expectations regarding involvement in Workforce Planning Programs

Contributions to Workforce Planning Programs	Benefits of Workforce Planning Programs
<i>What do businesses/agencies expect to contribute to Workforce Planning Programs?</i>	<i>What do businesses/agencies expect to gain from Workforce Planning Programs?</i>
<ul style="list-style-type: none"> • Personnel/staff time • Personnel/staff feedback and input • Access to workplace policies and procedures • Openness to feedback • Honesty in presentation of workplace practices • Willingness to train • Flexibility 	<ul style="list-style-type: none"> • Improved workforce output • Improved employee sustainability • Ongoing partnerships with state trainers • Decrease in unnecessary waste
<i>What does the health department and state agency expect to contribute?</i>	<i>What does the health department and state agency expect to gain?</i>
<ul style="list-style-type: none"> • Evidence-based analysis • Evidence-based training • Staff resources versed in their fields • Training on analysis tools • Honest feedback • Ongoing administrative support 	<ul style="list-style-type: none"> • Higher employment rates • Reduced poverty • Reduced secondary health problems • Improved quality of life in the county • Better use of employment resources and tools • More productive agencies and businesses

APPENDIX E.4

Table E.4. Engagement Plan Matrix

Stakeholder	Areas of influence/ interest	Project phase	Stakeholder manager	Engagement approach	Engagement tools	Frequency
Local businesses in the county that commit to the program	Provide job options, can do workplace analysis	Ongoing from the start	Business/agency manager/owner	Consult, train	Face to face contact, email check ins, surveys	Very frequent (weekly to biweekly)
Local businesses in the community that do not initially show interest in the program	Provide additional job options regardless if they engage in the analysis program	Periodically during the project	Business/agency manager/owner	Consult, discuss	Face to face contact, email check ins, surveys	Occasional (monthly to bimonthly)
unemployed CC residents	High interest, need jobs	Ongoing from the start	Community representatives	Consult, train	Face to face contact	Very frequent (weekly to biweekly)
underemployed CC residents	May just be comfortable at current job; may be willing to change due to low salary	Ongoing from the start	Community representatives	Consult, train	Face to face contact	Frequent (biweekly to monthly)
Informal leaders, agencies: religious centers, community centers	May be able to reach hard to access families and individuals. Their trust may help persuade interest	Periodically during the project	Community representatives	Consult	Face to face contact	Frequent (biweekly to monthly)

APPENDIX E.5

Memorandum of Understanding

Between Cumberland County Department of Health and North Carolina Office of State

Human Resources

This Memorandum of Understanding (MOU) sets forth the terms and understanding between the Cumberland County Department of Health (CC DoH) and North Carolina Office of State Human Resources (NCOSHR).

Background

Cumberland County residents reported low income and poverty to be a significant quality of life issue, and higher paying employment as a service needing the most improvement. Research suggests that programs that provide education, training, and support services help create sustained employability.

Purpose

This purpose and goals of partnership:

- To produce effective and sustainable strategies for improving employment opportunities in Cumberland County.
- To increase the number of businesses and agencies utilizing workforce planning tools for long term improved outcomes.
- To decrease rates of poverty in Cumberland county.

The above goals will be accomplished by undertaking the following activities:

Expanding the reach of the current Workforce Planning Program offered through the NCOSHR.

Responsibilities

Cumberland County Department of Health will be responsible for:

- Recruiting and reaching out to potential stakeholders – both agencies and individual residents
- Providing yearly data assessing and comparing health outcomes of program participants
- Serve as a liaison between businesses, individuals, and the NCOSHR as needed

North Carolina Office of State Human Resources will be responsible for:

- Recruiting and reaching out to potential stakeholders – both agencies and individual residents
- Providing staff and training resources from the Workforce Planning Program
- Organizing time and resources between businesses and the NCOSHR for trainings
- Serve as a liaison between businesses, individuals, and the CC DoH as needed

Timeline

- Both parties to organize focus groups: June 1 – August 1, 2021
- Meeting to analyze focus group data: by August 30, 2021
- Local agency forum: by September 30, 2021
- Identify 1st cohort: agencies, businesses, and individuals appropriate for Workforce Planning Program trainings
- 1st cohort of agencies/businesses to receive Workforce Planning Program training/analysis: October 1 – December 1, 2021
- 1st program evaluation period: January 2022 – February 2022
 - Assess changes in agency/business employment, increased job opportunities, challenges, successes
- Meeting with stakeholders to process evaluation: by March 30, 2022

- Proceed as appropriate

Reporting

The CC DoH will arrange monthly meetings via Zoom to check in with representatives from all stakeholder groups to determine progress of training, changes to job opportunities, etc. Additional meetings, trainings, or changes will be added based on results of monthly check-ins.

Funding

This MOU is not a commitment of funds.

Duration

This MOU is at-will and may be modified by the mutual consent of authorized officials from the CC DoH and NCOSHR. This MOU will remain in place for the duration of the 5-month program period, or otherwise as agreed upon by both parties.

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Partner Name	Partner Signature	Date
Anna Smith	<i>Anna Smith</i>	3/7/2021
Mark Jones	Mark Jones	3/7/2021

APPENDIX F – THOMPSON DELIVERABLES

PROBLEM STATEMENT

Social Determinant of Health (SDoH)

Economic stability is a social determinant which significantly affects Cumberland County (State of the County Health Report, 2019). More specifically, the chosen objective will be reducing the proportion of people living in poverty (SDOH-01). Poverty is cyclical, meaning that, “a high poverty rate is both a cause and a consequence of poor economic conditions” (State of the County Health Report, 2019). As a result, there is a high need to address this objective. Although the focus will be specifically on people living below the 200% federal poverty level, economic stability is inclusive of employment status and food insecurity as well. Poverty has a unifying effect among social determinants such as food insecurity, and income (Berman et al., 2018), and can ultimately result in adverse health conditions such as obesity and chronic illness (Berman et al., 2018).

Poverty has a detrimental effect upon health and is connected to adverse health outcomes (SOTCH Report, 2019). Children that reside in poverty, “are more likely to have physical health problems, behavioral problems, and emotional problems” (SOTCH Report, 2019). Furthermore, “poverty is the most significant non-communicable disease children are suffering from today” (Berman et al., 2018).

Geographic and historical context

Cumberland County is located in southeastern North Carolina and consists of roughly 652.32 square miles (Community Health Needs Assessment, 2019). The city of Fayetteville is the current county's seat, but it additionally contains other municipalities such as Eastover, Falcon, Godwin, Hope Mills, Linden, Spring Lake, Stedman and Wade (Community Health Needs Assessment, 2019). The demographics of the population are as follows: White (51.1%), African American (39%), and Hispanic/Latinx (11.9%) (SOTCH Report, 2019). The percentage of people living in poverty is roughly 17% (SOTCH Report, 2019). About 14.8% of people living in poverty within the county are unemployed (SOTCH Report, 2019). Furthermore, there is a large disparity in socioeconomic status within the county. For instance, zip code 28308 has the highest median household income in the county at \$114,861, while 28301 has the lowest median household income at \$24,409 (Community Health Needs Assessment, 2019).

Additionally, the leading cause of death in Cumberland County between 2014-2018 was heart disease, among both white and minority populations (SOTCH Report, 2019). This is a chronic condition that can be correlated with food insecurity or lack of constant access to food, obesity, and low socioeconomic status, which all can be directly linked to poverty. About 34% of adults in the county suffer from obesity, which equals about 1/3 of the adult population (County Health Rankings & Roadmaps, 2019). The County has made efforts in the past to begin addressing this social determinant, such as working to expand transit options in rural and low-income communities and working to revitalize and create jobs in communities that are most impacted by social determinants of health (SOTCH Report, 2019).

Priority population

In addressing this objective, the priority population will be low-income families within Cumberland County who live at or below the 200% federal poverty level. Demographics that are disparately affected in regard to poverty in this county include infants, children, adolescents and young adults ages 0-24 years of age, women, and African Americans, American Indians and Alaskan Natives (Community Health Needs Assessment, 2019). African Americans comprise more of the population in Cumberland County than North Carolina and are at a higher risk of poverty and chronic disease incidence and prevalence due to numerous socioeconomic determinants (SOTCH Report, 2019).

Measures of problem scope

The economic environment of Cumberland County highly suggests that poverty is far more prevalent than in the entire state (SOTCH Report, 2019). A greater number of children are also exposed to conditions of poverty in this county, and the percentage of children living below the poverty level in Cumberland County is 25.7% compared to that of North Carolina which is 23.9% (Community Health Needs Assessment, 2019). In addition, the life expectancy for men and women in Cumberland County is less than that of North Carolina, suggesting that there are greater existing health issues and adverse health outcomes overall (SOTCH Report, 2019). The life expectancy for Whites compared to African Americans in Cumberland County is 77.1 years versus 75.6 years (North Carolina Health Profile, n.d.). In North Carolina, the life expectancy for Whites is 77.9 years in comparison to African Americans, which is 74.5 years (North Carolina Health Profile, n.d.). This data demonstrates a strong disparity in life expectancy between the two groups in not only Cumberland County, but also in that state of North Carolina.

Another indicator that poverty is a large issue in this county is the socioeconomic status of the population. Although the median household income of North Carolina is \$52,413, the median household income of Cumberland County is only \$45,716, (SOTCH Report, 2019). This is notable, as residents of Cumberland County via community surveys ranked higher paying employment as the issue needing most improvement within the county (Community Health Needs Assessment, 2019). Moreover, among issues most affecting quality of life within the county, low income/poverty was ranked the highest (Community Health Needs Assessment, 2019). In addition, the unemployment rate in Cumberland County is 5.1%, in comparison to that of North Carolina which is 3.9% (SOTCH Report, 2019). Last, the African American population in Cumberland County is 38.7%, while African Americans comprise 22.2% of the population in North Carolina (Community Health Needs Assessment, 2019). Likewise, the Hispanic/Latinx population of Cumberland County is 11.6% compared with North Carolina which is 9.5% (North Carolina Health Profile, n.d.).

Rationale/Importance

Addressing economic instability is critical in Cumberland County due to the high prevalence of poverty that exists within this county (SOTCH Report, 2019). Furthermore, Cumberland County is comprised of a greater proportion of minorities, who are more significantly impacted by poverty, compared to that of North Carolina as a whole. “Minority racial groups are more likely to experience multidimensional poverty than their White counterparts” (Ethnic and Racial Minorities & Socioeconomic Status, 2017). This low socioeconomic status is a risk factor for poor health conditions and low economic development and is a driver of health disparities (Ethnic and Racial Minorities & SES, 2017).

Disciplinary critique

As a public health leader, addressing economic instability, and more specifically, poverty, is imperative in reducing health disparities and inequity. Poverty and social factors that contribute to poverty create inequities within society in regard to health distribution and overall quality of life (Ethnic and Racial Minorities & SES, 2017). Additionally, “race and socioeconomic status affect health exclusively as well as mutually” (Ethnic and Racial Minorities & SES, 2017). Lack of economic stability can amplify social determinants such as unemployment, low household income, lack of reliable transportation etc. which contribute to overall health (Cirigliano, 2021). Failure to address these determinants over time leads to larger gaps in equity between populations and communities. Thus, it is critical to address economic stability within Cumberland County to achieve health equity and better quality of life overall for all residents.

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APPENDIX F.1

Table F.1. Geographic and Economic Data on Cumberland County

Number of Children (Ages 0-18)	82,870
Number of Adults	252,638
Adult Obesity	34%
Percentage of Children w/o Health Insurance	5.6%
Children (Ages 0-17) that are Food Insecure	22.1%
Residents that Lack Access to Constant Food Supply	20%
Renters Paying 30% or More on Rent	46.9%
Residents that don't live Near a Grocery Store	13%
No of Births from Mothers who Were Overweight/Obese	56.3%
25-34 Age group highest population	17%
African American Residents	38.7%
Percentage of Alaskan Natives/American Indians that live in Poverty	29.8%
Life Expectancy of Whites vs. African Americans in Cumberland County	77.1 years vs 75.6 years
Life Expectancy of Whites vs. African Americans in North Carolina	77.9 years vs 74.5 years

ENGAGEMENT PLAN

Statement of Purpose: Economic stability is currently a crisis in Cumberland County, with 17% of the population living either at or below the 200% federal poverty level (State of the County Health Report, 2019). Workforce Planning is potentially a solution that involves multiple components and is an effort to help improve the employment landscape, and thus, economic stability within the county. We propose the utilization of a Workforce Planning Policy created by the NC Office of State Human Resources and in partnership with local employers and businesses, which consists of analyzing current workforce dynamics, identifying gaps in employment, forecasting human capital needs, and identifying key positions that are hardest hit by attrition and that are most difficult to fill (NC Office of State Human Resources, n.d.). In addition, partnerships will be made with the NC Career Works Center of Cumberland County, Cumberland County Department of Social Services, and United Way of Cumberland County etc. in order to provide skills assessments and training, assistance with resume writing, financial support with paying for additional education through degree and credential programs, and assistance with support services such as childcare and transportation. We identified and met with seven key stakeholder groups: Employers (businesses such as Walmart, Goodyear Tire, Cape Fear Health System, NC Office State Human Resources, Educational Institutions (NC State University and Fayetteville Technical Community College), community members, NC Works Career Center, Cumberland County Department of Social Services, and United Way of Cumberland County. These stakeholders all provide varying insight and specific worldviews which are all valuable to the implementation of this project. These stakeholders also attribute value in that most of them are from Cumberland County and thus, they know the environment and infrastructure of the county. We plan to engage these stakeholders through continued means

of communication, like virtual Zoom meetings and phone meetings, as well as through email, depending on each stakeholder's preferred communication method. Furthermore, in-person meetings will be conducted in order to foster continued stakeholder engagement and involve them in the planning and implementation stages. We plan to actively recruit new stakeholders who have a passion and connection with our project, as well as skills and resources to contribute. Program evaluation will be conducted quarterly in order to continually make improvements and ensure program sustainability.

Focus Groups and Town Hall Meetings

In order to involve the community within Cumberland County, focus groups will be conducted with residents monthly. This will serve as a continual method to learn about the current economic landscape of Cumberland County from the perspective of community members, and to gauge any positive or negative changes that might occur during the duration of the project. The focus groups will serve as a method of engagement in which community members, both directly and indirectly impacted by economic instability, can be actively involved and simultaneously serve as a way for us to comprehend the needs of the community. Coding of meeting transcripts will occur after each meeting to gauge commonalities in concerns of community members, and to assess common themes. Community town hall meetings will also be held monthly within various locations in Cumberland County to allow a range of participants to attend and provide diversity in responses. These meetings will be utilized by the Public Health Team/Researchers to inform the community of the current status of the project and implementation, as well as gather suggestions for improvement and build trust. The goal is to create a welcoming environment in which all people feel comfortable to share their perspective.

Meeting dates, times and locations will be distributed online, through social media, and through flyers posted throughout the community.

Brainstorming & Strategic Planning Sessions

Brainstorming and strategic planning sessions will be held monthly with all key stakeholders at a consistent location. These meetings will aid the Public Health Team/Researchers, as well as all other key stakeholders, in learning each stakeholder's specific worldview and provide some insight into their perspective. Thus, this will shed some understanding into each stakeholder's goals for the project. Moreover, these sessions will reveal what resources each stakeholder has available to them, and how they can contribute to the implementation. Additionally, time will be utilized to develop new ideas and brainstorm, and to evaluate what aspects of the program are successful, and which were unsuccessful. Improvements will continually be made, and the program will consistently be assessed to ensure that stakeholder needs are being met. These meetings will continue to be held monthly in the post-implementation phase.

Advisory Council

Meetings of the Advisory Council will take place monthly in a consistent location. The Advisory Council will be comprised of leaders and representatives from each of the key stakeholder groups. The purpose of the Advisory Council is to allow key stakeholder leaders to take more active roles in the planning and implementation phases, and to discuss and develop potential solutions for obstacles that have been identified. The members of the Advisory Council will also provide more individualized feedback and engage in evaluation methods that will assess the progress and successes of the project. In addition, the Advisory Council will inform decision-making and discuss next steps at each stage of the project. The council will consist of specific

community member leaders, Public Health Team/Researchers, two employers and businesses who are participating in the program, representative Denise Mazza from the NC Office of State Human Resources Commission, Interim Director Tracy Jackson of NC Works Career Center, one of the participating educational institutions (NC State or Fayetteville Technical Community College) and the Cumberland County Department of Social Services.

Community Resource Navigators

Community Resource Navigators are representatives from the Cumberland County Department of Social Services and United Way of Cumberland County. This position was created in order to help inform community members about available resources such as childcare, transportation, and financial assistance, and to connect them with those resources. Often, members of the community are unaware of resources that are provided within their community. The Community Resource Navigators also gauge the needs of community members and assess whether specific resources are needed in excess. Three permanent positions will be created for this role, and this position will serve as a liaison between community members and other stakeholders involved in the program. The navigators will attend the monthly brainstorming and strategic planning sessions and at least of the navigators will attend the monthly Advisory Council meetings.

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APPENDIX F.2

Table F.2. Methods of Engagement

Method of Engagement	Stakeholders	Function	Involvement
1. Focus Groups & Town Hall Meetings	Community members; Public Health Team and Researchers; Employers	To understand the worldview and perspective of community members; to keep community members informed of the status of the project	Meetings will be held monthly at a range of locations at the beginning of the planning phase and through implementation; can change to quarterly meetings post-implementation
2. Brainstorming & Strategic Planning Sessions	All key stakeholders (Employers, Public Health Team and Researchers, NC Office of State Human Resources, Educational Institutions, NC Career Works, community members, Cumberland County Department of Social Services, United Way of Cumberland County)	To learn the specific worldview of each of the key stakeholders; to gauge what resources they bring to the table and their connection to the issue; to develop ideas; evaluate what works and what doesn't; learn whether the program is meeting the needs of stakeholders	Meetings will be held monthly at the same location at the beginning of the planning phase and will continue to be held monthly post-implementation
3. Advisory Council	Specific community members and leaders; Public Health Team and Researchers; two employers/businesses who are involved in program; representative from NC Office of State Human Resources; representative from NC Career Works and Dept of Social Services; representative from an educational institution; community resources navigator	To allow key stakeholder leaders to take more active roles; to discuss and develop potential solutions for identified challenges; to provide an opportunity for more individualized feedback	Will be held monthly in the same location in the planning phase and during implementation; meetings will move to quarterly post-implementation

4. Community Resource Navigators	Representatives from Cumberland County Department of Social Services and United Way of Cumberland County; Community members; Public Health Team and Researchers	To help connect community members with available resources within the community; gauge needs of community members and assess whether specific resources should be increased; help to provide stability	Will attend monthly brainstorming and strategic planning sessions; a representative will attend the monthly advisory council meetings
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APPENDIX F.3

Memorandum of Understanding

Between Cumberland County Health Department & Walmart Cumberland County Supervisor

This Memorandum of Understanding sets the terms and understanding between the Cumberland County Health Department and the Manager of Walmart located in Hope Mills, NC in Cumberland County, in order to implement the Workforce Planning Program from the North Carolina Office of State Human Resources in Cumberland County.

Background

The economic landscape of Cumberland County. The Workforce Planning Policy will aim to create sustainable employment in Cumberland County, provide more opportunity for career advancement and higher wages, and improve the overall economy.

Purpose

The purpose and goals of partnership are:

- To produce a Workforce Planning Program that will analyze current workforce dynamics within businesses, identify gaps in employment, and implement solutions to enable organizations to meet its mission and objectives
- Predict future retirements and identify positions that are hardest hit by attrition, as well as positions that most difficult to fill
- Provide skills assessment and training and assistance with paying for additional education in order to improve competency and qualifications

- Create sustainable employment for the unemployed, underpaid, and those living in poverty

The above goals will be accomplished by undertaking the following activities:

Implementing the Workforce Planning Program in Cumberland County

Responsibilities

Cumberland County Health Department will be responsible for:

- Leading the implementation and connecting with Walmart; consulting with them and keeping them informed; engage them in decision-making processes
- Keeping track of qualitative and quantitative data; analyzing data trends and turnovers
- Providing technical assistance in preparing and implementing the program
- Monitoring new employees hired from the program during the pilot testing phase

Walmart will be responsible for:

- Connecting with all other stakeholders and serving as a liaison
- Connecting with other employers in the programs and building partnerships
- Supplying data and information from their business
- Communicating positions of need and skills/competency necessary to fill these positions

Reporting

The Cumberland County Health Department will record and update the number of employers (businesses) who decide to partner with the Workforce Planning Program every 3 months.

Walmart will be updated weekly in regard to changes in the program. Additionally, during the

pilot testing phase of the implementation within Walmart, data will be analyzed and recorded. This data will then be shared with the Manager of Walmart and representatives and will be compared with data from other businesses within the program in regard to positive outcomes. This will aid in measuring the reach of the intervention. Metrics for accountability will include required email check-ins every two weeks by Walmart to update the Public Health team on progress made and the current status of the implementation, as well as any changes made within the business.

Funding

This MOU is not a commitment of funds.

Duration

This MOU is at-will and may be modified by the mutual consent of authorized officials from the Cumberland County Health Department and the Manager of Walmart within Cumberland County. This MOU shall become effective upon signature by Jennifer Green of the Cumberland County Health Department and Gerard Wilson, the Manager of Walmart in Hope Mills, and will remain in effect until modified or terminated by any of the partners by mutual consent.

Partners:

Dr. Jennifer Green, Health Director of Cumberland County Department of Public Health
Phone: 910-433-3600

Gerard Wilson, Manager at Walmart in Hope Mills, North Carolina
Phone: 910-429-7401

Partner Name	Partner Signature	Date
Jennifer Green	Jennifer Green	3/7/2021
Gerard Wilson	Gerard Wilson	3/7/2021

APPENDIX F.4

Table F.3. Give-Get Grid

Contributions	Benefits
Employers will contribute their data and statistics from their business; information about human capital needs; current workforce environment	Employers can expect to benefit an increase in competent and skilled employees; gaps in employment filled; more efficient and sustainable hiring processes; less turnover; perhaps greater business profits if economic landscape of Cumberland County as a whole is improved
NC Office of State Human Resources will contribute the blueprint for the Workforce Planning Program and insight/advice on to conduct the program.	NC Office of State Human Resources can expect to benefit the opportunity for their policy/program model to be carried out in a real-world environment and gather results of this implementation for future use.
NC General Assembly will contribute the possibility for this program to become a statewide policy if successful over time.	NC General Assembly can expect to benefit having evidence to support their policy if they choose to move forward with creating a statewide policy
Educational Institutions (NC State & Fayetteville Tech) will contribute participation in the grant funding aspect of the program for people to obtain additional education/degrees/credentials at their schools	Educational Institutions (NC State & Fayetteville Tech) can expect to benefit larger numbers of students being enrolled in their degree programs; participation in Workforce Planning could provide gaps in employment to be filled on their campuses
Public Health Researchers/Team will contribute insight about social determinants, economic disparities; evidence-based interventions that have been previously tried	Public Health Researchers/Team can expect to benefit from gaining more evidence and data surrounding the efficacy of the Workforce Planning Program
Community Members will contribute their perspective surrounding their own experiences with the employment landscape; adverse and positive experiences with employment in Cumberland County	Community Members can expect to benefit more opportunities to gain sustainable employment, increase their skillset, and obtain promotions and increased wages; greater awareness surrounding available community resources
NC Works Career Center will contribute assets such as skills assessments and training, resume writing assistance, and financial support with paying for additional education	NC Works Career Center can expect to benefit more people being aware of the services they offer and utilizing those services; more partnerships with organizations

Cumberland County Department of Social Services will contribute knowledge of available community resources; financial assistance	Cumberland County Department of Social Services can expect to benefit more partnerships, more people accessing services and perhaps more funding ultimately if a greater need for resources is demonstrated
United Way of Cumberland County will contribute knowledge of available community resources; connection to other community non-profit organizations	United Way of Cumberland County can expect to benefit more partnerships, more people accessing services and perhaps more funding ultimately if a greater need for resources is demonstrated

APPENDIX F.5

Table F.4. Stakeholder Analysis Mapping

Stakeholder	Stakeholder Interest(s) in the Project	Assessment of Impact	Potential Strategies for Obtaining Support/Reducing Obstacles
Employers (Walmart, Goodyear Tire etc.)	Filling in employment gaps within the company; decreasing turnover rate	A	Highly involved in planning process
NC Office of State Human Resources (Representative Denise Mazza and other staff members)	Carrying out workforce planning program; expanding this program to other counties	A	Highly involved in planning process: Would most likely be open to participate-would like an opportunity to implement their Workforce Planning Policy
NC General Assembly	Potentially making this program a statewide program through policy changes	C	Somewhat involved in planning process; Might be swayed by evidence from public health researchers that program is effective
Educational Institutions (NC State & Fayetteville Technical Comm. Coll)	Partnering with the program to increase enrollment in its degree programs; Fill gaps in employment	B	Involved in the planning process
Public Health Researchers/Team	Carry out program implementation to see if Workforce Planning can help increase economic stability	A	Highly involved in the planning process
Community Members	Finding employment; increasing wages/salary; becoming economically stable	A	Highly involved in the planning process

NC Works Career Center (Interim Director Tracy Jackson and other representatives)	Connecting people to employers; increasing their skillset, providing assistance with resume writing/competency testing, and training	B	Involved in the planning process; Could provide opportunity for connection with more employers and businesses in the county
Cumberland County Dept. of Social Services	Connecting people to services such as transportation, childcare etc. to enable employment & education training	B	Involved in the planning process; Might help to see other service organizations that are involved
United Way of Cumberland County	Partnering with programs that aim to increase financial stability within the community through grant assistance	B	Involved in the planning process; Will need to know if our program meets the requirements for their grant assistance

APPENDIX F.6

Table F.5. One-on-One Interview Sessions

Sample Question:	Sample Question:	Sample Question:
How have you personally been affected by economic instability?	What should the economic landscape of Cumberland County look like ideally to you?	What is the most pressing issue regarding the economics in Cumberland County?

One-on-One Interviews will be conducted with all stakeholders individually, and with community members and citizens of Cumberland County who are affected by economic instability. These interviews would reveal themes and consistencies that would demonstrate specific priority areas of need.

SYSTEM, STAKEHOLDER & TRANSFORMATION ANALYSIS

The SDOH, economic stability, is a significant issue affecting countless people within Cumberland County, and a substantial contributor to other existing issues such as lack of adequate resources and chronic disease health conditions (State of the County Health Report, 2019). The North Carolina Healthy People 2030 Objectives aim to reduce the poverty level in Cumberland County from 17% to 10% (Cumberland County Dept of Public Health, 2019). While economic stability is comprised of numerous components and reaches every level of the socio-ecological model, addressing community-level determinants within Cumberland County might be the necessary key to aid in creating both economic security and financial sustainability (Cirigliano, 2021). This could, in turn, have lasting effects at the individual, interpersonal, and societal levels as well. Partnering with businesses, aiding individuals in finding high-quality and sustainable employment, and obtaining additional skillsets and educational attainment can help improve the workforce landscape of Cumberland County, and thus decrease poverty (NC Office of State Human Resources, 2007).

As of November 2020, the current unemployment rate for Cumberland County was 8.4%, which was higher than North Carolina's rate of 6.0% (Unemployment Rate-Cumberland County, 2020). Additionally, Cumberland County set a record high for unemployment in May 2020 when the rate increased to 15.7% (Unemployment Rate-Cumberland County, 2020). Although it has since improved, unemployment is still greater than that of the state of N.C. as a whole, and greater than the 5.1% rate from 2019 (State of the County Health Report, 2019). Furthermore, 14.8% of people living in poverty (defined as at or below the 200% FPL) are unemployed (State of the County Health Report, 2019). Last, residents of Cumberland County via community

surveys ranked higher paying employment as the issue needing most improvement within the county (Community Health Needs Assessment, 2019). This clearly demonstrates that there is an existing need to address unemployment and generate methods of improved job sustainability and salary increase overall in Cumberland County.

In order to address these issues, both a program and policy transformation were chosen, that were aimed at improving economic stability. The chosen program initiative was based upon an existing state-operated career center run by The Cumberland County Workforce Development Board under the North Carolina Department of Commerce. This career center, the Cumberland County NC Works Career Center, is one of the many centers in the state of NC which assists people with finding meaningful and sustainable employment, through offering services and training, as well as connecting people with employers (NC Works Online, n.d.). The Cumberland County NC Works Center specifically offers job-training programs and services, such as direct job listings, job search and life skills classes, skills assessments, assistance with resume and cover letter preparation, and assistance with paying for additional degree and credential programs through an eligible training provider list program (NC Works Online, n.d.). In regard to economic stability, this program had potential in connecting people with the necessary skills and training to obtain quality employment, and higher wages. Additionally, according to the U.S. Bureau of Labor Statistics, “as workers’ educational attainment rises, their unemployment rates decrease and earnings increase” (Bureau of Labor Statistics, 2020). This program could present an opportunity to address unemployment in addition to those who are underpaid within the county.

The policy initiative was a Workforce Planning Policy created by the North Carolina Office of State Human Resources. This program was implemented to proactively ensure the

development and maintenance of a workforce capable of delivering quality services to its citizens, and is “centered around having the right number of people, with the right skill set and competencies, in the right jobs at the right time” (NC Office of State Human Resources, 2007). This Workforce Planning model involves analyzing current workforce dynamics within businesses, determining future workforce needs, identifying gaps, and implementing solutions to enable an organization to meet its mission and objectives (NC Office of State Human Resources, 2007). By analyzing turnover trends and data, predicting future retirements, and forecasting human capital needs, it will be possible to identify key positions that are hardest hit by attrition as well as positions that are most difficult to fill (NC Office of State Human Resources, 2007). Partnering with local businesses within Cumberland county such as Goodyear Tire, Walmart, and the Cape Fear Valley Health System would enable us to implement the Workforce Planning Policy, and focus on creating sustainable employment for the unemployed, underpaid, and those living in poverty.

In order to identify key stakeholders necessary for carrying out the implementation, multiple stakeholder analysis methods were utilized such as a Stakeholder Analysis Table, Power vs. Interest Matrix, and CATWOE (Customer, Actor, Transformation, Worldview, Owner, and Environment) Table. All of these methods were vital in identifying the value for each stakeholder in the project, the shared vision that stakeholders might possess, the ideal transformation that is needed and what a successful implementation looks like, each stakeholder’s contribution and access to resources, and their role as well as power held. According to the Stakeholder Analysis Table, key stakeholders for the implementation would include Employers (Goodyear Tire, Walmart, Cape Fear Valley Health System), NC Office of State Human Resources, NC General Assembly, Educational Institutions (NC State University

and Fayetteville Technical Community College), Public Health Researchers/Team, Community members, Interim Director Tracy Jackson and representatives of NC Works Career Center, Cumberland County Department of Social Services, and United Way of Cumberland County. Each of these stakeholders has its own personal connection to this project, as well as unique worldview. For instance, employers are most concerned with filling employment gaps and decreasing turnover rate, the NC Office of State Human Resources is interested in expanding its Workforce Planning Policy, educational institutions are concerned with increasing their enrollment within their degree programs and filling gaps in its employment, while community members aim to find sustainable employment, increase their skillset and education, and earn higher wages.

Additionally, the Stakeholder Analysis Table as well as the Power vs. Interest Table, provided the opportunity to measure the degree of involvement each stakeholder would have. Stakeholders such as employers, the NC Office of State Human Resources, Public Health researchers, and community members were identified as central to the implementation and have high interest; thus, they would be highly involved in the planning process. While the first three have high power and would thus be fully engaged, the community members have low power and would be kept informed adequately, as well as given the prospect to actively participate in the process. Other stakeholders like the educational institutions, NC Works Career Center, Cumberland County of Social Services, and United Way of Cumberland County would still be involved in planning processes, but not to the same degree as stakeholders in the first group. The educational institutions and the Cumberland County of Social Services most likely have higher power, while the NC Works Career Center and United Way have lower power and resources. Last, members of the NC General Assembly would most likely not be highly involved within

planning, nor would they most likely have the time to be actively involved as they have many other duties and responsibilities. Therefore, they would fall under the high power, low interest category.

When utilizing the CATWOE method, the worldview of several of the key stakeholders was assessed individually. From this, each stakeholder's personal stake and connection to the mission of the intervention were revealed, in addition to what the transformation or change would ideally look like to each person or group. The usage of CATWOE also provided a sense of shared vision amongst the key stakeholders. This is imperative, as it not only brings stakeholders closer together in the process but provides more motivation while working towards a shared goal. The transformation from the employers' view would be to fill gaps in employment within the company with people who have necessary skill sets, and to increase efficiency in hiring processes. This transformation would be essential to them because greater efficiency in hiring could lead to more sustainable employment within the company and less turnover (NC Office of State Human Resources, 2007). Furthermore, if the economy of the county is improved, then business will be better and there will be more people to purchase products. The NC Office of State Human Resources is concerned with carrying out their Workforce Planning program in order to decrease turnover and improve hiring efficiency, while creating job sustainability. This transformation would increase employment opportunities for those in need, and lead to the development and maintenance of a workforce capable of delivering quality services to its customers. The Public Health Researchers aim to assess whether a Workforce Planning Program would be effective in creating job sustainability and increasing employment within Cumberland County. This is driven by the belief that unemployment, underemployment and low wages and salaries are large contributors to economic instability within Cumberland County. The shared

vision amongst these stakeholders is to collectively improve the economy of Cumberland County by creating a strong workforce with opportunities to increase wages, and to decrease unemployment. This can lead to the potential outcome of decreasing the number of people within the county that live at or below the 200% federal poverty level, and thus, improving overall economic instability.

First, to attain the goal of increasing economic stability by strengthening the employment landscape within the county, connecting with employers and utilizing the Workforce Planning Program would be most effective (NC Office of State Human Resources, 2007). Furthermore, partnering with the NC Works Career Center would aid with program implementation, due to their contribution of skills training and financial assistance for completion of additional educational programs etc. This two-component program not only addresses hiring processes, needs, and unemployment but will create salary increases through the attainment of additional skills and education. This combination will foster a more sustainable workforce overall in Cumberland County.

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APPENDIX F.7

Table F.6. Power vs. Interest Matrix

High ↑	<div data-bbox="198 575 326 638">Power</div> NC General Assembly Hospitals	Insurance Companies (Employer-sponsored) Employers (Walmart, Goodyear, Cape Fear Valley) Universities (NC State University) Community Colleges (Fayetteville Tech) Cumberland County Department of Social Services NC Office of State Human Resources Public Health Researchers/Team
	Members of the Community who are not impacted	United Way of Cumberland County Food Banks Staffing Agencies Cumberland County Health Department NC Works Career Center- Cumberland County Impacted Community members
Low		High
		<div data-bbox="743 1039 893 1102">Interest</div>

APPENDIX F.8

Table F.7. CATWOE (Customer, Actor, Transformation, Worldview, Owner, Environment)

<p>Employers (Businesses):</p> <p>C: Unemployed, Underemployed</p> <p>A: Regional Board Members</p> <p>T: To fill gaps in employment in company with people who have necessary skill set; increase efficiency in hiring</p> <p>W: Greater efficiency in hiring can lead to more sustainable employment within the company, less turnover; if economy of the county is better, then business will be better—more people to purchase products</p> <p>O: CEO/COO/Corporate Board Members of the company; public health researchers to show effectivity of methods</p> <p>E: Public negative perceptions of company such as workers are underpaid, treated poorly</p>
<p>NC Office of State Human Resources:</p> <p>C: Unemployed, Businesses and Corporations</p> <p>A: North Carolina Office of State Human Resources Staff</p> <p>T: To carry out the Workforce Planning program in order to decrease turnover, improve hiring efficiency and create job sustainability; increase employment opportunities for those in need</p> <p>W: This program can lead to the development and maintenance of a workforce capable of delivering quality services to its customers, and identifying gaps within the workforce</p> <p>O: Public Health Researchers; Businesses and Corporations</p> <p>E: Potentially low number of businesses who choose to participate; businesses who might not want outside interference</p>
<p>Public Health Researchers/Team (Cumberland County Dept of Public Health):</p> <p>C: Unemployed, Underpaid</p> <p>A: Employers, Public Health Team</p> <p>T: To assess whether a Workforce Planning Program would be effective in creating job sustainability and increasing employment within Cumberland County</p> <p>W: Unemployment, underemployment and employees being underpaid are large contributors to economic instability within Cumberland County</p> <p>O: NC General Assembly</p> <p>E: Low Participation-Reluctance of some businesses to participate; contrasting beliefs that the economy in the county is satisfactory; negative perceptions that people could work or obtain employment if they tried hard enough-could pull themselves out of poverty</p>